EFFECTIVENESS OF SEXUAL HEALTH APPROACH ON KNOWLEDGE, ATTITUDE, AND EXPRESSED SAFE SEX BEHAVIOR REGARDING HIV/AIDS AMONG TRANSGENDERS AT WELFARE SOCIETY, VELLORE.

M.Sc (NURSING) DEGREE EXAMINATION

BRANCH – I MEDICAL SURGICAL NURSING

SRI NARAYANI COLLEGE OF NURSING,

VELLORE-55

A Dissertation submitted to

THE TAMIL NADU DR.M. G. R. MEDICAL UNIVERSITY,

CHENNAI – 600 032.

In partial fulfilment of the requirement for the degree of

MASTER OF SCIENCE IN NURSING.

APRIL – 2016

CERTIFICATE

This is to certify that this dissertation entitled **"EFFECTIVENESS OF SEXUAL HEALTH APPROACH ON KNOWLEDGE, ATTITUDE, AND EXPRESSED SAFE SEX BEHAVIOR REGARDING HIV/AIDS AMONG TRANSGENDERS AT WELFARE SOCIETY, VELLORE"** is a bonafide work done by **Mrs. chamundeswari. p,** Sri Narayani college of Nursing, Vellore - 55, in partial fulfilment of the requirement for award of the degree of Master of Science in Nursing, Branch I – Medical Surgical Nursing, under my guidance and supervision during the academic period from April 2015 – 16.

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Mrs.Chamundeswari.P

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LIST OF ABBREVATIONS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Anti-Retroviral Drugs
ASRH	Adolescent Sexual & Reproductive Health
BCC	Behavior Change Communication
CBO	Community-Based Organization
CCU	Consistent condom use
CDC	Centers for Disease Control and Prevention
CHW	Community Health Workers
CSW	Commercial Sex Workers
DAC	Deputy of AIDS control
HAART	Highly Active Antiretroviral Therapy
EMG	Emerging Markets Group
FSW	Female Sex Workers
GBMSM	Gay, bisexual and men sex with men
HBC	Home-Based Care
HBV	Hepatitis B virus
HIV	Human Immunodeficiency Virus
IDU	Injecting Drug User
KAB	Knowledge, attitude and practices
M&E	Monitoring & Evaluation
MCH	Maternal and Child Health
MOH	Ministry of Health
MSM	Men who have Sex with other Men

LIST OF ABBREVATIONS – cont'd…..

NACP	National AIDS control programme
OI	Opportunistic Infection
PHE	Peer Health Educator(s)
PLWHA	People Living With HIV/AIDS
PrEP	Pre-exposure prophylaxis
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
SW	Sex Worker
TI	Targeted intervention
TOT	Training of Trainers
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNGASS	UN General Assembly Special Session
VCT	Voluntary (HIV) Counseling and Testing
WHO	World Health Organization

ABSTRACT

INTRODUCTION

Acquired Immunodeficiency Syndrome (AIDS) is a disease of the human immune system caused by the human immunodeficiency virus (HIV). Transgenders people are one of the most vulnerable groups to HIV. Sexual education is of great importance to change individuals' attitudes, practices and knowledge about HIV and STIs.

STATEMENT OF THE PROBLEM

Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among Transgenders at welfare society, Vellore.

OBJECTIVES:

1. To assess the pretest knowledge, attitude and expressed safe sex behavior regarding HIV among Transgenders.
2. To determine the effectiveness of sexual health approach on knowledge, attitude and expressed safe sex behavior regarding HIV among Transgenders.
3. To find the association between the post- test levels of knowledge, attitude and expressed safe sex behavior among Transgenders and selected demographic variables.

METHODS: A quantitative research approach with pre experimental, one group pretest-post test design was adopted and fifty study participants were selected by

using simple random technique. Pre and post test data was collected by using demographic variables and structured questionnaire. The data was analyzed using descriptive and inferential statistics.

RESULTS: The results showed that the pretest mean score of knowledge was 15.04 and posttest mean score was 20.6. The mean difference was 5.56. The computed‘t’ value (t=40.88) was higher than the table value (t=3.496, p<0.001). The pretest mean score of attitude was 30.6 and post test mean score was 41.96. The mean difference was 11.36. The computed‘t’ value (t=34.36) was higher than the table value (t=3.496, p<0.001). The pretest mean score of expressed safe sex behavior was 37.2 and posttest mean score was 49.88. The mean difference was 12.68. The computed‘t’ value (t=32.93) was higher than the table value (t=3.496, p<0.001). ‘Chi’ square test of knowledge, revealed that age, marital status, living arrangement, using condom are statistical significant at (p<0.05), test of Attitude revealed that using condom are statistical significant at (p<0.05), test of expressed safe sex behavior revealed that using condom are statistical significant at (p<0.05). Hence H1 – H6 were accepted.

CONCLUSION: The study concludes that sexual health approach is effective in improving knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among Transgenders.

Key words: Effectiveness, sexual health approach, Transgenders.

CHAPTER I

INTRODUCTION

HIV does not make people dangerous to know, so you can shake their hands and give them a hug Heaven knows they need it.

Princess Diana

Acquired Immunodeficiency Syndrome (AIDS) is a disease of the human immune system caused by the human immunodeficiency virus (HIV).The Human immunodeficiency virus (HIV) targets the immune system and weakens people's surveillance and defence system against infections and some types of cancer. As the virus destroys and impairs the function of immune cells, infected individuals gradually become immunodeficient. Immunodeficiency result in increased susceptibility to a wide range of infections and diseases that people with healthy immune systems can fight off. Immune function is typically measured by CD4 cell count. Establishment of normal ranges of CD4 in both among adult and pediatric population was conducted by NARI. 97.5 percentile of CD4 counts in normal males and females were 381-1585 and 447 to 1846 per cm respectively CD4 normal range.

HIV can be transmitted in many ways, such as vaginal, oral sex, blood transfusion, and contaminated hypodermic needles. HIV is found in the body fluids of an infected person (semen and vaginal fluids, blood and breast milk). The virus is passed from one person to another through blood- to- blood and sexual relationship. In addition, infected pregnant women can pass HIV to their babies during pregnancy, delivering the baby during child birth, and through breast feeding.

The most advanced stage of HIV infection is Acquired immunodeficiency Syndrome (AIDS), which can take from 2 to 15 years to develop depending on the individual. AIDS is defined by the development of certain cancers, infections, or other severe clinical manifestations. Both the viruses and the syndrome are often referred to together as HIV/AIDS. People with HIV have what is called HIV infection. As a result, some will then develop AIDS. The development of numerous opportunistic infection in an AIDS patient can ultimately lead to death.

According to research, the origins of HIV date back to the late 19th or early 20th century in West- Central Africa. AIDS and its cause, HIV were first identified and recognized in the early 1980s and it has spread rapidly throughout the world. There is currently no cure for HIV/AIDS. Antiretroviral Therapy (ART) can slow the course of the condition. Some infected people can live a long and relatively healthy life.

BACKGROUND OF THE STUDY

According to the **United Nations joint program on HIV/AIDS (UNAIDS)** and the **World Health Organization (WHO)** Statistics, Over 78 million people have been infected with HIV since the start of the epidemic in the early 1980s. In 2012, AIDS-related illness was the 6th leading cause of death worldwide. HIV statistics at the end of 2013 indicate that around 35 million people are currently living with HIV worldwide, 38 percent less than in 2001. In the same year, around 2.1 million people became infected with HIV and 1.5 million died of AIDS-related illness. HIV and AIDS are found in all parts of the world, however some areas are more affected than others, so ending the AIDS epidemic by 2030 will require smart scale-up to close the gap.

India has the third largest HIV epidemic in the world. The first cases of HIV infection and AIDS in India were detected in 1986 and since then HIV infection has been reported in all states. HIV prevalence in India was an estimated 0.3% in adult, 2.1 million people living with HIV. Indians accounting for about four out of 10 people infected with the deadly virus in the Asia—Pacific region, according to a **UN report in the year 2013**. The five states with the highest HIV prevalence (Nagaland, Mizoram, Manipur, Andhra Pradesh and Karnataka) are in the south or east of the country.

The term gender identity refers to a person's basic sense of self, and transgender refers to people whose gender identity does not conform to a binary classification of gender based on biological sex, external genitalia, or their sex assigned at birth. It includes gender-nonconforming people with identities beyond the gender binary who self-identify as: male-to-female or transgender women; female-to-male or transgender men; two-spirit; and people whose self-identify simply as women or men.

It is estimated that there are 15 million transgender people globally. Transgender people are one of the most vulnerable groups to HIV. HIV prevalence among 11,066 transgender women, living around the world, was found to be 19 percent. Only 43 percent of countries address the needs of transgender people in their national AIDS strategies. Stigma, discriminatory laws, social exclusion and a general lack of understanding about transgender issues all make it extremely difficult for transgender people to protect themselves from HIV infection.

Globally, a high proportion of transgender people are engaged in sex work, up to 44 percent according to UNAIDS. This can be for various, complex reasons. Often,

due to social marginalization and a lack of employment opportunities, sex work is the only income available to transgender people. Sex workers sometimes get paid more for unprotected sex, and often feel under pressure not to use a condom, which makes them highly vulnerable to HIV. Studies have shown that some transgender people who want to affirm their gender through sex or who fear rejection from sexual partners can be more likely to agree to unprotected sex. The stress of social isolation also leads to a much higher rate of drug and alcohol use among transgender people, which can affect people's judgment of risk and make people less careful to use condoms effectively.

There are high rates of unprotected anal sex among transgender women, which carries a high risk of HIV transmission another way that this group can be at risk of HIV is through injecting substances for gender enhancement. It is common in some settings for transgender people to obtain injectable hormones, the most common form of gender enhancement, and carry out the injecting themselves. Without counselling on safe injecting practices, people going through this process may be very vulnerable to HIV transmission.

Transgender populations are at a greater risk for HIV infection due to a variety of factors, including proximate factors such as multiple sexual partners and unprotected sex, both anal and neo-vaginal (vagina constructed during sex reassignment surgery). More distal factors such as social exclusion, experience of abuse, stigma, including self-stigma, and discrimination may interact with direct sexual behavior to influence HIV risks. Unprotected sex may occur with regular and non-regular partners, as 67.3% of transgender women in one recent **Thai study** reported consistent condom use during anal intercourse with casual partners, but only

39% consistent condom use with regular partners. Among sex workers, 86% of participants reported engaging in unprotected anal sex with regular partners, and 27% reported unprotected anal sex with commercial partners. Diverse sexual networks, including having both male and female partners, may facilitate HIV transmission.

Prevention is of great importance to combat the spread of HIV/AIDS globally, where multilayered social, political and economic efforts are needed to reduce the HIV risk and vulnerability. The biggest goal of HIV prevention is to change individuals risk behavior. For the past 30 years HIV prevention has been dominated by behavioral interventions that seek to influence attitudes, knowledge and behaviors. Where sexual-health education, promotion of condom use and education of injecting drug users about the dangers of sharing equipment are included sexual education is of great importance to change individuals' attitudes, practices and knowledge about HIV and STIs. This study results showed that sex education has increased in 73% of individuals the delay of first sexual activity, 77% of individuals underwent protected sex and 80% of individuals improved attitudes regarding HIV and STIs.

NEED FOR THE STUDY

HIV is a global disease especially spread in the developing countries. The disease is not curable and prevention is therefore crucial, but for a successful prevention an improved knowledge about the disease is needed. Lack of preventive knowledge increases the risk of acquiring the disease and transmitting it to others. Infection with human immunodeficiency virus (HIV) and subsequent development of acquired immunodeficiency syndrome (AIDS) possess a significant challenge to modern medicine and humanity.

Transgenders people are one of the groups most vulnerable to HIV, HIV prevalence among 11,066 transgender women, living around the world, was found to be 19 percent. Only 43 percent of countries address the needs of transgender people in their national AIDS strategies. With HIV prevalence's among this group ranging from 8 percent to 68 percent, and yet they remain severely overlooked in the HIV and AIDS response worldwide.

India has the third highest number of estimated people living with HIV in the world. According to the HIV Estimations 2012, the estimated number of people living with HIV/AIDS in India was 20.89 lakh, with an estimated adult (15-49 age group) HIV prevalence of 0.27% in 2011. India has demonstrated an overall reduction of 57% in the annual new HIV infection among adult population from 2.74 lakh in 2000 to 1.16 lakh in 2011, reflecting the impact of various interventions and scaled-up prevention strategies under the National AIDS Control Programme (NACP).

In 2012, two sites of Tamil Nadu (Vellore, Nammakal) showed a prevalence of HIV/AIDS from 0.7% to 0.8% respectively. Tamil Nadu has an estimated population of more than 30,000 transgender people. It has made great strides in trying to integrate transgender people into the society. This include welfare schemes initiated by the Government and acceptance of transgender people into the mainstream media and film industry.

HIV prevention for transgender individuals must be a public health priority. Though there is no national HIV/AIDS surveillance data for the transgender population, local data suggest disproportionately high rates of HIV with estimated infection rates among specific transgender populations ranging from 14 percent to 69 percent incidence in the general population.

Transgender people can have very diverse HIV prevention needs. Targeted prevention approaches that respond to the specific needs of individuals are essential to reducing HIV infections.

The preventive knowledge of HIV has increased globally but still less than 50% of people living in the 15 countries with the highest HIV prevalence can correctly answer basic 4 questions regarding HIV and its transmission. The proportion of individuals who used a condom during the last sexual intercourse and number of sexual partners varies widely globally where access and information about HIV are different from country to country (**Crosby, Graham, Milhausen, Sanders & Yarber, 2012).** In Southeast Asia less than 25% of men and women reported using a condom during last higher-risk intercourse **(UNAIDS, 2010).**

In 2009 in the USA, the highest proportion of transgender people newly diagnosed with HIV. Transgender people need to be able to access prevention advice that is culturally appropriate for their background and community.

Many developing countries are working in several ways to extend knowledge, attitudes and practices (KAP) on HIV prevention though. Programs have been developed to encourage sexual risk reduction, protective behaviors, such as promotion of condom use, contraception, voluntary counseling and testing, targeted information provision of needle and syringe programs. Many of the programs have led to increased HIV knowledge and practices in the developing countries, During the year 2013-2014 targeted Interventions for Transgender persons under the **National AIDS Control programme (NACP-IV)** , the main objectives of this Programme is to prevent the spread of new HIV infection among High Risk Groups, to improve health-seeking behaviour of High Risk Groups (HRG) and reduce their risk of acquiring

Sexually Transmitted Infections (STI) and HIV infections. High risk groups under Targeted intervention include Female Sex Workers (FSW), Men who have Sex with Men (MSM), Transgender (TG)/ Hijras, Injecting Drug Users (IDU), bridge populations include high risk behaviour Migrants and Long Distance Truckers. Targeted Intervention provides services such as behaviour change communication, condom promotion, safe needles and syringes (for people who inject drugs), STI care, referrals for HIV testing, Syphilis testing and Referrel for ART. Till financial year 2013-2014, about 7.18 lakh (82.7%) FSWs and about 2.59 lakh (82.7%) high- risk MSMs were covered under the programme. The mapping of Transgenders/Hijras shows an estimate of around 70,000 TG/Hijras. Operational guidelines for implementing Targeted Interventions among TG/Hijras have also been drafted along with IEC material specific to the needs of these populations. During 2013-2014, 13,200 TG/Hijras were identified throughout India.

Good knowledge, attitudes and practices (KAP) of HIV prevention are essential in order not to acquire HIV infection and to prevent the disease from spreading. A proper and well-functioning prevention of HIV requires clear and relevant information and instructions from health care givers.

In 2012, UNDP and National Institute of Epidemiology (NIE), initiated a study to map estimate of TG population who are most at risk of HIV. The scope of the Dept. of AIDS Control (DAC) is to prevent the spread of HIV by implements Targeted Interventions (TI) projects. Through TI projects provide HIV prevention messages through increase knowledge, Attitude, and Behaviour Change. These messages address the high risk behaviour and aim to give out messages on safer sex and health- seeking practices, counselling and treatment for Sexually Transmitted

Infections (STIs) is provided, provision of free condoms and linkages to health facilities for HIV testing and HIV related care& support services. Currently, approximately 23,000 TG people across different States are being covered through TI projects. A comprehensive care package has been designed for TG persons at risk under NACP.

Education is currently the only means of preventing the spread of HIV/AIDS, which is needed to protect from the virus and subsequent disease involves changes at many levels. Individuals have adequate knowledge to make changes in their thinking, behaviour, attitudes, beliefs and policies. Therefore, this study was done to assess the knowledge about HIV, followed by an educational intervention have been doneto improve their knowledge, attitude, expressed safe sex behaviour regarding HIV/AIDS among transgenders.

Statistics proves that HIV among transgenders is increasing from 0.27% to 0.30% in India (2015). Studies prove that awareness among transgenders is poor, if improved can prevent the risk of HIV infection. Transgenders are socially marginalized hence they fail to seek help from Health care provider. As the researcher found a gap between the need for awareness of transgenders and opportunities to interact with health care provider, researcher sought ways to reach out to the transgenders to equip them with knowledge to prevent HIV/AIDS.

STATEMENT OF THE PROBLEM:

Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among Transgenders at welfare society, Vellore.

OBJECTIVES:

1. To assess the pretest knowledge, attitude and expressed safe sex behavior regarding HIV among Transgenders.
2. To determine the effectiveness of sexual health approach on knowledge, attitude and expressed safe sex behavior regarding HIV among Transgenders.
3. To find the association between the post- test levels of knowledge, attitude and expressed safe sex behavior among Transgenders and selected demographic variables.

OPERATIONAL DEFINITIONS:

EFFECTIVENESS:

It refers to the outcome or result in terms of change in knowledge, attitude and expressed safe sex behavior regarding HIV/AIDS among Transgenders after sexual health approach, as measured by structured questionnaire for knowledge, likert scale for attitude, and expressed safe sex behavior.

SEXUAL HEALTH APPROACH:

It refers to the package of information given to the transgender on HIV/AIDS, which Includes lecture with video, demonstration of condom usage, and distribution of pamphlets on HIV/AIDS.

KNOWLEDGE:

It refers to the existing level of information obtained by transgender regarding HIV/ AIDS as measured by a structured questionnaire on knowledge, prepared by researcher.

ATTITUDE:

It refers to the way of thinking, opinion, perception of transgender regarding HIV/AIDS as elicited through an attitude scale (modified from Mohammed Torabi and William Yarber, 1992 attitude scale) prepared by researcher.

EXPRESSED SAFE SEX BEHAVIOR:

It refers to change in expressed behavior by consistent & correct use of condoms, practice safe sex, being aware about the prevention of HIV/AIDS (modified from Colleen DiIorio, 2009 expressed safe sex behavior scale) prepared by researcher.

HIV:

It refers to Human immuno deficiency Virus, a retrovirus, which destroys the CD4 cells by weakening the immune system in humans.

AIDS:

It refers to Acquired immune deficiency syndrome. which a person with HIV may develop opportunistic infections and or carcinomas when CD4 cells count goes down to 50.

TRANSGENDER:

It refers to people whose gender identity and expression are different to the social expectations of male/female, i.e. the third gender.

HYPOTHESES:

- **H_1:** There is a significant difference between pre and posttest levels of knowledge, regarding HIV/AIDS among Transgenders
- **H_2:** There is a significant difference between pre and posttest levels of attitude, regarding HIV/AIDS among Transgenders.
- **H_3:** There is a significant difference between pre and posttest levels of safe sex behavior regarding HIV/AIDS among Transgenders.
- **H_4:** There is a significant association between posttest levels of knowledge and selected demographic variables among Transgenders.
- **H_5:** There is a significant association between posttest levels of attitude and selected demographic variables among Transgenders.
- **H_6:** There is a significant association between posttest levels of expressed safe sex behavior and selected demographic variables among Transgenders.

LIMITATIONS:

The study is limited to

- Are the members of selected transgender welfare society, at Vellore.
- Data collection duration only 6 weeks.
- Sample size only 50.

CONCEPTUAL FRAMEWORK:

The conceptual framework is a theoretical approach to the study of problems that are scientifically based and emphasizes the selection, arrangement and classification of the concepts.

The conceptual framework that suited for the present study was based on general system theory. It was proposed by **"Albawing Von Bettanlaffy, 1986 general system's model of Nursing"** The model focuses on the concepts- person, health, environment and nursing. Environment includes all influences that affect the development and behavior of person.

General system theory is useful in breaking the whole process in to essential task to ensure goal realization. The number of parts of the system is totally dependent on what is needed to accomplish the goal, purpose or aim is necessary for system to function.

Health is the process of becoming integrated as a whole person. Nursing is the promotion of adaption in each of the models, thereby contributing to the person's health, quality of life and dying with dignity.

The aim of the study is to improve the knowledge, attitude, expressed safe sex behavior regarding HIV/AIDS among Transgenders,

The system consist of three components

- ✓ Input
- ✓ Throughput
- ✓ Output
- ✓ Feed back

INPUT

Input in any system energy, information, material or human that enters in to system through boundaries. In present study the input refers to the Transgenders population between 18 to 50 years acquiring sexual health approach to prevent HIV/AIDS infection.

THROUGHPUT

Throughput is the process that occurs at some point between input and output process which enables the input to be transferred in such a way it can be readily used by the system. In this throughput refers to give multiple intervention package of sexual health approach regarding prevention of HIV/AIDS.

OUTPUT

Output is an energy or material transferred to environment. In this study output refers to improve the knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS. Output is assessed by evaluating scores of same questionnaire on pretest and posttest.

FEEDBACK

Feedback is the process by which information is received at each stage of the system and is feedback as input to guide/direct in its evaluation.

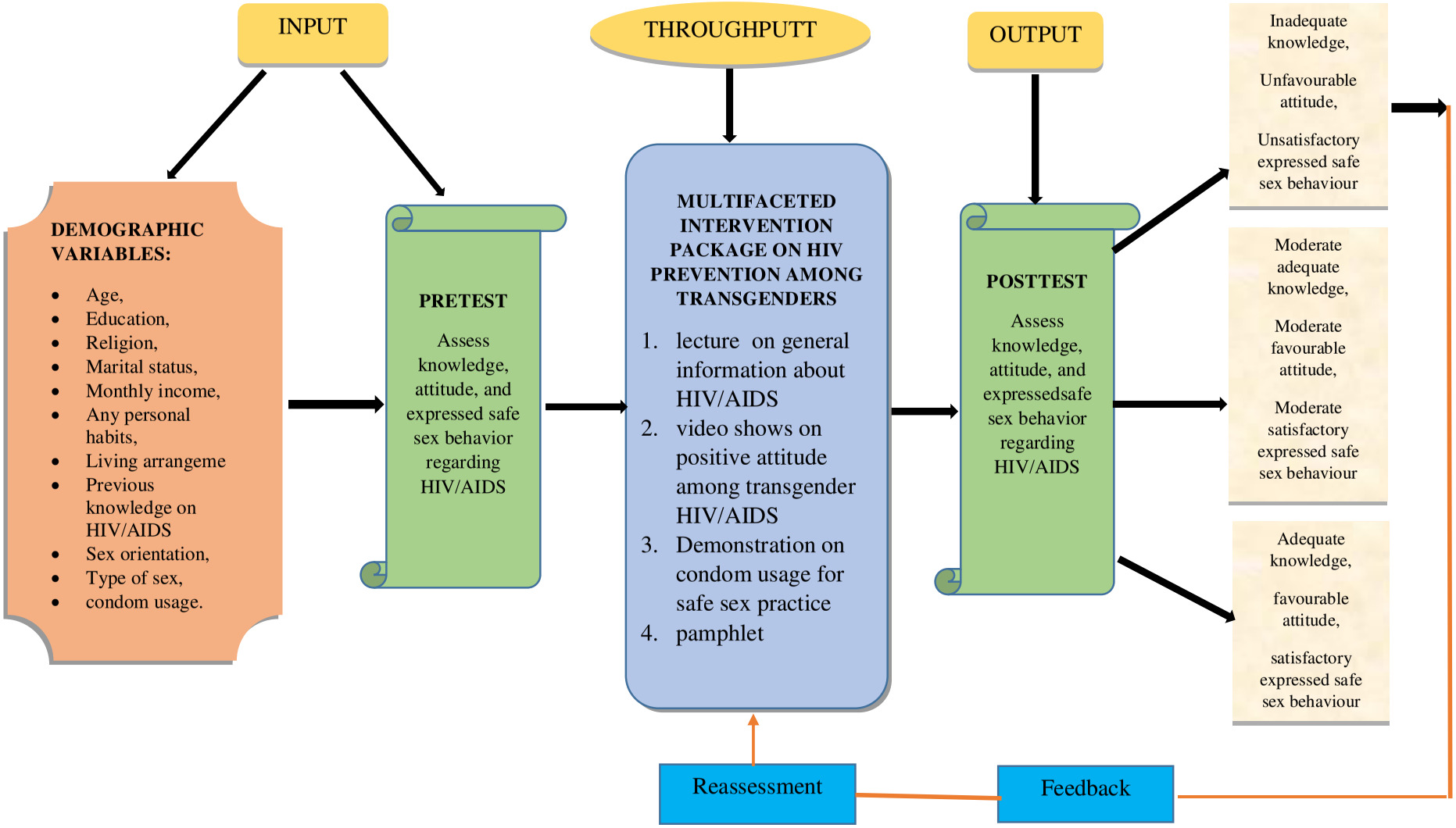


Fig 1: CONCEPTUAL FRAME WORK BASED ON ALBAWING VON BETTANLAFFY GENERAL SYSTEM MODEL OF NURSING 1986

CHAPTER II

REVIEW OF LITERATURE

A literature review is a synthesis of the literature that describes what is known or has been studied regarding the particular research question.

(Patricia. L. 2012)

Review of literature is divided into three sections are follows:

Section - A: Studies related to knowledge on HIV/AIDS.

Section - B: Studies related to Attitude on HIV/AIDS.

Section - C: Studies related to expressed safe sex behavior on HIV/AIDS.

Section - A: Studies related to knowledge on HIV/AIDS.

Al-Tawfiq .J.A.et.al (2015) conducted a questionnaire study among 5,000 participants, 79% male, aged between 15 and 45 years. Of the total, 1288 (25.8%) had not heard about HIV/AIDS. Knowledge of HIV transmission was poor in 90% of the respondents. Of the total, 737 had read about HIV/AIDS materials and 649 participants had been previously tested for HIV. The majority of participants (85%) held a negative attitude toward people living with HIV/AIDS. Those who were knowledgeable about HIV/AIDS expressed more a positive attitude. The largest proportion of the individuals who had engaged in non-marital sex were single (54.9%) followed by the married ones (40.4%). Men cited pleasure as the main reason for such activity (84.6%), whereas women (73.4%) cited financial gain. 32.1% believed that TV and schools were the best media through which information with regard to

HIV/AIDS could be imparted Knowledge of HIV/AIDS, its mode of transmission, and prevention measures was poor. School group are at high risk of transmitting HIV/AIDS, due to lack of knowledge and awareness, Educational programs specifically needed by school group were required.

Owiredu Hanson.et.al. (2015) conducted a cross-sectional survey data from a non-probability sample of Ghanaian MSM (N=137). These peoples have a high HIV seroprevalence, to investigate associations between HIV/STD knowledge, HIV stigma, and sexual behaviors to conduct a secondary data analysis. Overall, knowledge levels about HIV and STDs were low, and HIV stigma was high. There was no age-related difference in HIV stigma. Younger MSM (≤25 years) used condoms less often for anal and vaginal sex than did those over 25. Relative frequency of condom use for oral sex was lower in younger men who had higher STD knowledge and also was lower in older men who reported high HIV stigma. Knowledge and stigma was not associated with condom use for anal or vaginal sex in either age group. These descriptive data highlight the need for the development of intervention programs that address HIV/STD prevention knowledge gaps and reduce HIV stigma in Ghanaian communities.

Kang.D.et.al. (2015) conducted a cross-sectional survey among MSM among 1230 participants, 82.8% was single, 85.7% aged <35 years, and 47.2% received college or higher education. There was 28.6% MSM who reported to be married or ever had sex with woman in the past 6 months. 74.5% had ≥6 HIV-related knowledge score. Bisexual behavior was independently associated with higher levels of HIV/AIDS-related stigma/discrimination, older age, and lower HIV-related knowledge score. Expressing higher levels of HIV/AIDS-related

stigmatizing/discriminatory attitudes were independently associated with bisexual behaviors, lower HIV-related knowledge score, the number of male sex partners in the past 2 weeks, unprotected male anal sex in past 6 month, and inversely associated with never received HIV test and peer education in past 12 months.

Mustanski B.et.al (2015) conducted a longitudinal cohort study among sample of 344 young men who have sex with men. Eligible participants were between the ages of 16 and 20 years, born male, and had previously had at least one sexual encounter with a man and/or identified as gay or bisexual. Participants with less than a high school diploma and those with a high school diploma had lower knowledge scores, an average (66.4%), than participants who had obtained post-high school education (78.1%). In addition, controlling for age, race and level of education, higher HIVknowledge scores were associated with fewer condom errors. These findings stress the need to for increased attention to HIV transmission-related educational activities targeting the social realities and unique risk mechanisms of young men who have sex with men.

Montaner. J.S.et.al (2015) conducted a cross-sectional survey to analyze the awareness and knowledge of treatment as prevention was assessed among HIV-positive and HIV-negative gay, bisexual and other men who have sex with men in Vancouver, Of 719 participants, Overall, 46% heard of treatment as prevention with differences by HIV status [69% HIV-positive vs. 41% HIV-negative gay, bisexual, and men sex with men. In adjusted models: HIV-positive Gay, Bisexual, MSM were more likely to have heard of Treatment as Prevention if they were Canadian born, unemployed, not using party drugs and had higher CD4 counts; HIV-negative GBMSM were more likely to have heard of Treatment as Prevention if they were

Caucasian students, had higher education, a regular partner and multiple sexual partners. The leading information source was doctors (44%) for HIV-positive GBMSM and community agencies (38%) for HIV-negative GBMSM, followed by gay media for both populations (34%).

Honwana.N.et.al.(2014) conducted a cross-sectional study to investigate AIDS Indicator Survey. Of persons with positive HIV test results (N=1182), 61% were unaware of their serostatus. Men had twice the odds of being unaware of their serostatus compared with women. Most PLHIV were more likely to be unaware of their serostatus than those who used a condom.

Benjamin Grin.B.A.et.al (2014) one-time anonymous survey was administered to assess general knowledge about HIV in the study population using 18-item measure of general HIV knowledge Questionnaire. Using the same true/false question format as the Knowledge Scale, this measure assesses the basic knowledge about modes of HIV transmission, prevention, and symptoms, overall, general HIV knowledge was high. As shown, all items except one had >70% correct response rates. 93% of respondents knew that "coughing and sneezing do not spread HIV," and 93% knew that "having sex with more than one partner can increase a person's chance of being infected with HIV." One item assessed student knowledge about the 'window period' for HIV testing. 17% of respondents (N=17) incorrectly believed that "taking a test for HIV one week after having sex will tell a person if she or he has HIV." Overall internal reliability of the general HIV knowledge items was 0.72.

Konda.K.A.et.al (2013) conducted a cross-sectional study of knowledge of sex partner serostatus among high-risk men who have sex with men and transgender women's implications for HIV prevention, and analyzed data from the 2008 MSM

Sentinel Surveillance Survey. Multivariate analysis assessed the effect of age, education, sexual identity, number of male partners, and alcohol use during intercourse, type of partnership and length of partnership using logistic regression.735 participants provided data on 1,643 of their most recent sex partners from the last 3 months. 179/735 (24.4%) of all participants knew HIV test results for at least one of their 3 most recent partners, corresponding to 230/1643 (14.0%) of all sexual partnerships in the last 3 months. In multivariate analysis, casual and exchange sex partners, compared to stable partners, were negatively associated with knowledge of partner serostatus, whereas relationships lasting longer than one night were positively associated with knowledge of partner serostatus. Knowledge of partner serostatus was not associated with unprotected anal intercourse with that partner.

Alemagno.S.A.et.al (2013) conduct a study of Psychometric analysis to determine the properties of an HIV knowledge scale administered with populations at high risk for HIV infection. HIV prevention programs targeting men who have sex with men, Blacks, and young adults commonly use measures of HIV knowledge as an important component of demonstrating overall program effectiveness. In this study, we administered an adapted version of a previously validated HIV knowledge scale to participants of a large, city-wide HIV prevention program (n = 5,027) and performed psychometric analysis to determine if differences existed across populations. Analysis showed that the HIV knowledge scale was performed poorly by men who have sex with men, but very well done by Transgenders. Results were similar for Blacks, Hispanics, and Whites, very poor for 30- to 39-year-olds, but very well for 60+ year olds. Findings underscore the need for further research on the measurement of HIV knowledge among high-risk populations and the importance of culturally appropriate survey items tailored to each population.

Dhakal .S.et.al (2010) conducted a cross-sectional explorative study for 97 men having sex with men in Kathmandu Valley using snow balling sampling technique, the respondents were interviewed using structured questionnaire. Although overall knowledge regarding HIV/AIDS and Sexual transmitted Infections (STI) is high some misconception about way of transmission is present. Majority of respondents still practiced unsafe sexual behaviors, which included multiple sex partners, irregular use of condom, frequent and regular anal sex, sex in exchange of money. More than half of them considered that they had little risk of getting HIV/AIDS. One third (33%) of the respondents had higher secondary education followed by 30.9% with secondary education and 24.5% with primary education. Remaining 8.5% were illiterate and 3.2% were completed degree courses. Among the respondents41.5% performed receptive role in the sexual relationship with male sex partners, and19.1% performed penetrative role. Majority (64.9%) of the respondents self-indented themselves by sexual orientation as followed by 24.5% gay and 10.6%. Nearly 31%of respondents reported to be married.

Section - B: Studies related to Attitude on HIV/AIDS.

Sitzler. C.et. al (2015) conducted a study in-depth interview among 100 MSM community members based on Contemporary antiretroviral therapy (ART) which can produce viral suppression of HIV, maintain health, and prevent onward HIV transmission from infected persons to their sexual partners, giving rise to the concept of treatment as prevention. Most men in the sample were aware of the availability of testing and knew testing locations, but many voiced great personal ambivalence about being tested, feared knowing their HIV status, expressed concern about stigma, loss of confidentiality, held beliefs indicative of medical mistrust. Participants did not

spontaneously cite benefits of being tested, risk reduction behavior changes made as a consequence of testing, nor the benefits of testing to get early medical care for HIV infection. There is a gap between the public health field's perception of testing benefits and the beliefs about testing held by racial minority MSM in this sample. To increase the desired outcomes from VCT for minority MSM.

Cuervo Whyte. et.al. (2015) conducted a study to assess the relationship status, relationship ideation, and sexual agreements affected HIV/sexually transmitted disease (STD) prevention strategies and high-risk behaviors in young men who have sex with men (MSM). They found that partnered MSM more commonly used condoms with casual partners and knew the reported HIV status of all their partners, compared to single MSM. MSM reporting restricted sexual agreements more commonly used condoms during oral and anal intercourse with their main partners and casual partners compared to MSM reporting unrestricted sexual agreements. The data suggest that relationship status should be considered by health care providers when counseling MSM and that behavioral intervention should target sexual agreements as a mechanism to reduce HIV/STD transmission.

Barmettler. D.A.et.al (2015) conducted a cross-sectional study to assess the prevalence of condom use and its determinants among company workers engaged with commercial sexual partners in Ecuador. The study was based on a random sample of 115 companies and 1,732 workers. 1,561 sexually active workers, 311 (19.9 %) reported having intercourse with sex workers. Among them 25.9 % did not use a condom at the last sexual intercourse. As for condom use frequency over the last 12 months, 29/208 (13.9 %) reported never, 23 (11.1 %) sometimes, 24 (11.5 %) almost every time and 132 (63.5 %) every time. Factors adversely affecting condom

use frequency over the last 12 months were female gender, older age, low educational level and married workers living with spouse. By contrast, factors such as age at first sexual intercourse, job category, HIV transmission and prevention measure knowledge, single workers, previous exposure to HIV intervention programs and having a casual sexual partner were not affecting condom use frequency. When considering condom use during the last sexual intercourse or during the past 12 months with commercial sexual partners, results were similar.

Keri Totona.et.al (2011) conducted a cross-sectional survey among 1597 tertiary level students, 757 (48%) males and 832 (52%) females from 12 institutions, examined their level of knowledge, attitudes and beliefs about HIV/AIDS. The study revealed that the majority of the students have a very good knowledge, and have positive, Healthy and compassionate attitude towards those infected with HIV/AIDS. Almost half (46.5%) of the respondents think that learning about sex and the use of condoms could also encourage young people to engage in more frequent sex. This study has shown that, students depict a positive attitude towards those infected with HIV/AIDS. Although the great majority (94%) of the students is afraid of getting the disease, only about 49% say that they prefer to keep away from those infected with the disease. When asked if people with HIV should be separated from the normal community life, 77% disagreed, which may well be considered a very healthy attitude and approach towards the victims. It could also be an indication of the good knowledge on HIV/AIDS. In spite of the various seminars, classes and inputs on HIV/AIDS, more than 59% of the students still think that they have not heard enough about this disease yet. Due to the awareness of HIV/AIDS, if they would be careful in choosing their partner, a vast majority (94%) of students responded “Yes”. 89% of the

respondents, in this study, stated that young people already in high schools should be taught about sex and HIV/AIDS.

Shoaa.S.et.al (2010) conducted a comparative study to investigate the attitude towards HIV/AIDS and related socio-cultural factors, among 600 high school students in Shiraz. In this research, attitude has three dimensions knowledge, emotion and tendency to action. Descriptive statistics showed that students did not have enough knowledge about HIV/AIDS. The 44.3% of students had low knowledge, 36.9% moderate knowledge and only 18.8% had high knowledge. Also the results indicated that attitude for 69.8% of student has in middle level, 15.4% positive and 14.9% negative. Islamic 80 religious beliefs have an important role on attitude towards this disease. Major of study, sex, mother's occupation and use of some mass media such as books and newspapers were other main influencing factors in the students' attitude. This study showed that parent education, major of study, father's occupation and use of books and the Internet are the most important variables affecting on the participants' knowledge. Age, sex, parents' education, religious beliefs, use of some mass media such as TV, the internet, newspapers, satellite and books affect emotion. Finally, there is a relationship between religious beliefs, sex and major of study, use of satellite, television, radio and books with tendency to action.

<u>Section - C:</u> Studies related to expressed safe sex behavior on HIV/AIDS.

Zhong. F.et.al.(2015) conducted a questionnaire survey among 4,904 MSM to obtain the information about their demographic characteristics and sexual behavior, the average age of the MSM was (28.77±7.24) years, and 70.3% of them had high education level; the unmarried MSM accounted for 72.7%. The HIV infection rate and syphilis prevalence were 8.7% and 4.4% respectively. The co-infection rate of

HIV and Treponema pallidum was 1.2% (59/4 904). About one in three MSM did not use condom at latest homosexual behavior, 43.5% did not use condoms at each homosexual behavior in the past three months. Lower education level, occupation (worker or farmer), non-consistent condom use at each sex with men in the past three months, receiving HIV test or not and Treponema pallidum infection were associated with HIV infection. Age≥40 years, lower education level, multi male sex partners in the past three months and HIV infection were associated with Treponema pallidum infection.

Mendelsohn. J.B.et.al (2015) conducted a study to evaluate the Impact of a community-based intervention to reduce risky sexual behaviour among 750 female sex workers randomly selected. The intervention improved consistent condom use with any partner type in the previous month. Consistent condom use with clients in the three most recent sex acts increased in both arms, and with primary partners in the intervention arm, but there was no difference between groups after adjusting for baseline condom use and venue type. There were no differences in cumulative incidence of any STI (i.e., chlamydia, gonorrhoea, syphilis) between groups. HIV transmission knowledge, condom use skill, and self-efficacy for using condoms were improved by the intervention. HIV-related stigma declined HIV and STI risk perception were improved (4.6 to 13.9%, and 9.4 to 20.0%, respectively). The intervention was associated with these improvements after adjusting for the baseline measure and venue type.

Caceres.C.F.et.al(2015) conducted a cross-sectional study of low HIV testing frequency, high-risk behaviour among men who have sex with men and transgender women analyzed baseline survey data from 718 high-risk.

Participants were recruited from 24 neighborhoods in and around Lima, Peru. They assessed HIV testing frequency, testing behaviour, motivations and barriers to testing. Multivariate analysis identified correlates to prior HIV testing. Overall, 79.6% reported HIV testing within their lifetimes, however, only 6.2% reported an average of two tests per year. The most commonly reported motivators for testing were to check one's health (23.3%), lack of condom use (19.7%), and availability of free testing (14.0%), while low self-perceived risk for HIV (46.9%), fear of a positive result (42.0%), and lack of access to testing services (35.7%) were the most frequently reported barriers.

Ding.et.al (2015) conducted a cross-sectional survey among selected 620 MSM in 2015. To examine homosexual and heterosexual behaviors, and HIV infection among men who have sex with men (MSM) in Eastern China. Of them, 58.2% aged 18 to 39 years and 49.5% were currently married with a female. The age of first homosexual contact was 26.7 years on average, ranging from 12 to 66 years. 91.0% had multiple male sex partners and 86.1% also had female sex partners in lifetime. 70 (11.3%) of the participants were tested HIV-positive. A total of 620 independent egocentric sexual networks involving 620 study participants and 1,971 reported sexual partners in the past 12 months were constructed, including 70 networks for the 70 HIV-positive participants with their 221 sexual partners and 550 networks for the 550 HIV-negative participants with their 1,750 sexual partners. The median network degree was 3 overall and was not different between HIV-positive participants and HIV-negative participants. The proportion of networks with a multiple male sexual partnership was 63.7% overall, 62.8% for HIV-positive participants and 63.8% for HIV-negative participants. The proportion of networks with both male and female sexual partners was 44.8% overall, 47.1% for HIV-

positive participants and 44.5% for HIV-negative participants. Consistent condom use and knowledge of HIV infection status were rare within the network partners.

Liam burghardt.et.al (2014) conducted a study using 19 question Likert-scale survey to assess knowledge of pre exposure prophylaxis; attitudes towards cost, side effects, alternative prevention methods; the effects of PrEP on sexual behaviors and practices. The survey was administered at study entry and six months later to HIV seronegative, men who have sex with men and male-to female transgendered women who have sex with men who participate in high-risk sexual behavior. Between June and September 2013, 65 participants from the metropolitan Denver area completed the survey. The reported number of sexual partners in the past six months ranged from zero to 150 partners and 75% reported condom use during all sexual encounters. Although 72.3% reported prior knowledge of PrEP only five participants (7.7%) reported ever using PrEP in the past. Participants were most likely (93.8%) to use PrEP in the future if they were in a monogamous relationship with an HIV-infected partner and least likely to use PrEP if it required out-of-pocket costs (10.7%). Younger age was associated with decreased odds of future PrEP use even if PrEP was provided free of charge.

Eskild Petersen.et.al (2014) conducted a study to examine the prevalence of HIV-related sexual risk behaviors and the socio-demographic correlates with HIV-related sexual risk behaviors among male-to-female (MtF) transgender persons. Data were collected from a sample of 232 individuals through venue-based and snowball sampling and face-to-face interviews. The HIV-related sexual risk behaviors among the MtF transgender persons were: sex without using a condom (48.3%) unprotected anal sex (68.1%) and unprotected sex with multiple partners (88.4%). Statistically

significant differences were found for age, income, education, alcohol habit, and sex with more than two partners per day for these three different HIV-related sexual risk behaviors , transgender persons with a secondary or higher level of education were three times more likely to have unprotected sex with multiple partners compared to those with a primary level or no education. There is an urgent need for programs and interventions to reduce risky sexual behaviors in this minority population.

Ogunlayi. M.et al. (2014) conducted a bivariate analysis study to identify the changes in high risk sexual behaviour among adolescents aged 15-19 years. It focused on changes in the history of use of condom with boyfriends/girlfriends, engagement in transactional sex, sex with multiple partners and age of sexual debut. Data was also analysed for association between risk behaviour and possible predisposing factors. Over the five year period, HIV prevalence in the population increased significantly especially in female. The number of female adolescents who became sexually active decreased significantly, using of condom at last sexual act with non-marital sexual partners significantly increased. There was an insignificant increase in the proportion of males and females who engaged in transactional sex and who had multiple sex partners over the study period. More females who engaged in transactional sex were HIV positive, and more males who were sexually active in the last 12 months were HIV positive. Attention needs to be paid to the national programme for the prevention of mother to child transmission of HIV programme as well as HIV prevention needs of female adolescents.

Mary Spink Neumann.et.al (2013) conducted a meta-analytic study to estimate the prevalence of HIV infection and risk behaviors of transgender persons. HIV behavioral prevention literature identified 29 studies focusing on male-to-female

(MTF) transgender women; five of these studies also reported data on female-to-male (FTM) transgender men. Meta-analytic findings indicated that 27.7% of MTFs tested positive for HIV infection (four studies), while 11.8% of MTFs self-reported being HIV-seropositive. Large percentages of MTFs (range, 27–48%) reported engaging in risky behaviors (e.g., unprotected receptive anal intercourse, multiple casual partners, sex work). Prevalence rates of HIV and risk behaviors were low among FTMs. Contextual factors potentially related to increased HIV risk include mental health concerns, physical abuse, social isolation, economic marginalization, and unmet transgender-specific healthcare needs.

Kovvali.et.al (2013) conducted a large-scale cross-sectional survey in 2010-2011 among FSWs (sample size: 3557) and Hijira-MSM (sample size: 2399) in Andhra Pradesh, study was measured by participation in a public event (no, yes), and a binary (low, high) index of collective efficacy and assess the relationships between collectivization and outcome indicators directly and through mediation of variables such as self-efficacy for condom use and utilization of government health facilities. 88% shows that among FSWs, high levels of collective efficacy and collective action were associated with consistent condom use (CCU) with regular clients. Among HR-MSM, participation in a public event and collective efficacy were correlated with condom use with paying partners. The association of high levels of collectivization with CCU, STI treatment-seeking from government health facilities, ability to negotiate for condom use, and self-efficacy in utilizing government health facilities is relevant to effort to improve the effectiveness and sustainability of HIV prevention programs in India and beyond.

Rebecca Firestone. Et.al (2013) conducted a Quasi-Experimental study for evaluation of Transgender women, particularly at risk of HIV infection, but little evidence exists on effective HIV prevention strategies with this population. We evaluated whether Sisters, a peer-led program for transgender women, could reduce HIV risks in Pattaya, Thailand. The study used time-location sampling to recruit 308 transgender women in Pattaya into a behavioral survey in 2011; consistent condom and condom/water-based lubricant use in the past 3 months with commercial, casual, and regular partners; and receipt of HIV testing in the past 6 months. Program coverage reached 75% of the population. In a matched sub-sample (n = 238), participation in outreach was associated with consistent condom/water-based lubricant use with commercial partners. Attendance at the Sisters drop-in center was associated with receiving an HIV test. Dedicated transgender-friendly programs are effective at reducing HIV risks and require expansion to better serve this key population and improve HIV prevention strategies.

Coleman, et.al (2012) conducted a multi-mode survey among 433 trans people for HIV-related risk behaviours, HIV testing and self-reported HIV. High proportions - 25% of female-to-male (FTM) and 51% of Male- to female (MTFs) individuals - had not had a sex partner within the past year. Of MTFs, 19% had a past-year high-risk sexual experience, versus 7% of Female to transgender men. The largest behavioural contributors to HIV risk were sexual behaviours some may assume trans people do not engage in: unprotected receptive genital sex for FTMs and insertive genital sex for MTFs. Overall, 46% had never been tested for HIV. Approximately 15% of both FTM and MTF participants had engaged in sex work or exchange sex and about 2% currently work in the sex trade. Self-report of HIV prevalence was 10 times the estimated baseline prevalence for Ontario. However,

given wide confidence intervals and the high proportion of trans people who had never been tested for HIV, estimating the actual prevalence was not possible Explicit inclusion of trans people in epidemiological surveillance statistics would provide much-needed information on incidence and prevalence.

Moore T.et.al (2011) conducted a study to assess examined prevalence and correlates of unprotected sex with a primary male partner in a sample of n = 174 transgender women. Participants completed surveys on demographic characteristics, relationship dynamics with their male primary partner, sexual behavior, substance use, and psychosocial factors. Overall, 41% reported HIV positive status, 13% had another sexually transmitted infection during the past year, and 34% had unprotected sex with a male primary partner during the past 3 months. Factors associated with unprotected sex with a primary partner included living with the partner, drug use, alcohol use, education level, low self-efficacy to use condoms, and perceived discrimination. Notably, 35% of transgender women in HIV-discordant primary partnerships had unprotected sex with their male primary partner during the past 3 months, and 18% of transgender women in HIV-positive concordant primary partnerships had unprotected sex with an outside partner during the past 3 months. HIV prevention interventions for transgender women must address risk behavior in the context of primary partnerships as well as sex with concurrent partners outside the relationship.

Mimiaga. MJ.et.al (2010) conducted a mixed methods study of qualitative interview and a brief interviewer-administered survey. Of the sexual health needs of transgender who have sex with nontransgender men. 16 transmen who reported sexual behavior with nontransgender men completed Interviews until redundancy in responses was achieved. Participants perceived themselves at moderately high risk for

HIV and STDs, although 43.8% reported unprotected sex with an unknown HIV serostatus nontransgender male partner in the past 12 months. The majority (62.5%) had used the Internet to meet sexual partners and "hook-up" with an anonymous nontransgender male sex partner in the past year. A lifetime STD history was reported by 37.5%; 25.0% had not been tested for HIV in the prior 2 years; 31.1% had not received gynecological care in the prior 12 months. Integrating sexual health information "by and for" transgender men into other healthcare services, involving peer support, addressing mood and psychological wellbeing such as depression and anxiety, Internet-delivered information for transgender and their sexual partners, and training for health care providers were seen as important aspects of HIV and STD prevention intervention design and delivery for this population.

Worku. A. et.al (2015) conducted a quasi-experimental study with peer education intervention purposively selected four secondary schools (two secondary schools for the intervention and other two for the control group) Ethiopia. 560 students from randomly selected sections of grade 11 were assessed through anonymous questionnaires conducted in pre- and post-intervention periods. When the pre and post intervention data of each group were compared, comprehensive knowledge of and willingness to go for HIV counseling and testing showed significant differences among intervention group students during post intervention period. Moreover, students in the intervention group were more likely to use condoms during post intervention period compared to students of the control group. Students in the intervention group demonstrated positive changes in HIV related comprehensive knowledge and showed better interest to go for HIV testing in the near future. Furthermore, positive changes on risky sexual behaviors were reported from the intervention group.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology is a way to solve the research problems systematically. Methodology refers to the techniques used to structure a study and to gather and analyze information in a systematic fashion.

Polit& Beck (2013).

The present study utilized quantitative approach to assess the "Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV among the Transgenders at selected welfare society", Vellore.

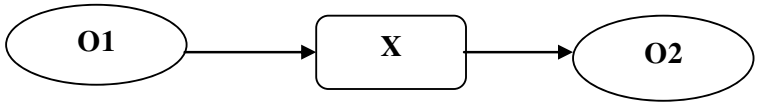
This chapter includes research method, research design, research setting, population, sample, sample size, sampling techniques, selection of the tool, content validity, reliability, pilot study, data collection procedure and plan for data analysis.

RESEARCH APPROACH:

The research approach used for this study is quantitative approach.

RESEARCH DESIGN:

Pre experimental one group pretest-posttest design.



Key:

O1 - Pretest to assess the existing level of knowledge, attitude, and expressed safe sex behavior regarding HIVAIDS among Transgenders.

X - Sexual health approach on HIV/AIDS, (lecture, demonstration, pamphlet, video).

O2 - Posttest to assess the levels of knowledge, attitude, and expressed safe sex behavior among Transgenders.

DESCRIPTION OF VARIABLES:

Independent variables : Teaching on sexual health approach

Dependent variables : Knowledge, attitude, and expressed safe sex behavior on HIV/AIDS

Demographic variables : Age, education, religion, marital status, monthly income, any personal habits, living arrangement, previous knowledge on HIV/AIDS, sex orientation, type of sex, condom usage.

SETTING OF THE STUDY

The study is conducted at Thirunangai Mempattu Sangam, Vellore. The setting is chosen on the basis of feasibility and availability of adequate samples.

POPULATION:

The target population of the present study is Transgenders.

SAMPLE

The sample is the subset of a population selected to participate in the research study

(Polit&Hungler 2012).

The sample of the present study comprised of 50 Transgenders

SAMPLING TECHNIQUE:

The sampling technique used for this study is simple random technique.

SAMPLING SIZE:

The present study includes 50 samples, selected based on inclusion and exclusion criteria.

CRITERIA FOR SAMPLE SELECTION:

INCLUSION CRITERIA: The transgenders who are

- Able to understand Tamil or English.
- Available at the time of data collection.
- In age group above 18 years to 50 years.

EXCLUSION CRITERIA: The transgenders who are

- Not willing to participate in the study.
- Selected for pilot study.

DEVELOPMENT OF TOOL:

Based on the objectives of the study, after extensive and systematic review of literature, the researcher developed a demographic variables and Performa schedule to assess the effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among Transgenders.

DESCRIPTION OF THE TOOL

SECTION A:

It contains 11 items of demographic variables of clients like age, education, religion, marital status, monthly income, any personal habits, living arrangement, , previous knowledge on HIV/AIDS, sex orientation, type of sex, condom usage.

SECTION B:

It consists of three parts of self-administered and modified questionnaires to assess knowledge (25), attitude (10), and expressed safe sex behavior (15) regarding HIV/AIDS. Totally 50 questions were formulated under various domains.

PART I: SELF-ADMINISTERED QUESTIONNAIRES REGARDING KNOWLEDGE ON HIV/AIDS

SCORING: The knowledge on HIV/AIDS is measured in terms of structured knowledge questionnaires, The scale consist of 25 statements, which consist of dichotomous questions with true or false options to assess the Knowledge on HIV/AIDS. The maximum score is 25 and minimum score is Zero.

The questions (1,3,5,8,9,13,14,16,17,18,19,20,21,22,24,25) are assigned as True answers, score of one and the false answers score of zero.

The questions (2, 4, 6, 7, 10, 11, 12, 15, and 23) are assigned false answer, score of one and the true answer score of zero.

SCORE INTERPRETATION:

The scores will be interpreted as follows:

≤50% - Inadequate knowledge

51 – 75% - Moderate adequate knowledge

≥76% - Adequate knowledge

PART II: 5 POINT LIKERT SCALE ON HIV ATTITUDE

SCORING: Attitude scale is developed for assessing the attitude of Transgenders regarding HIV/AIDS, it's a 5 point likert scale consisting of 10 items. It is graded as Out of these 5 items were positive statements (2, 3, 5, 7, 8) and 5 items were negative statements (1, 4, 6, 9, 10).

For the positive question the score is measured as follows

- Strongly agree (SA) **:** 5
- Agree (A) **:** 4
- Undecided (UD) **:** 3
- Disagree (SD) **:** 2
- Strongly disagree (SDA) **:** 1

For the Negative question the score is measured as follows

- Strongly agree (SA) **:** 1
- Agree (A) **:** 2
- Undecided (UD) **:** 3
- Disagree (SD) **:** 4
- Strongly disagree (SDA) **:** 5

SCORING INTERPRETATION:

The score will be interpreted as follows:

≤50% - unfavourable attitude

51 – 75% - moderately favourable attitude

≥76% - favourable attitude

PART III: STRUCTURED QUESTIONNAIRE ON EXPRESSED SAFE SEX BEHAVIOR

SCORING: Expressed safe sex behavior scale is developed for assessing the safe sex behavior of transgenders regarding HIV/AIDS, The scale consists of 15 statement. It is graded as:

- Never : 1
- Sometimes : 2
- Most of the times : 3
- Always : 4

The maximum score is 60, and minimum score is 15. Out of these 9 items were positive statements (1, 3, 4, 6, 7, 10, 11, 12, and 14) and 6 items were negative statements (2, 5, 8, 9, 13, and 15).

SCORE INTERPRETATION:

The score is interpreted as follows:

≤50%	-	unsatisfactory expressed safe sex behavior.
51 – 75%	-	Moderately satisfactory expressed safe sex behavior
≥76%	-	satisfactory expressed safe sex behavior.

PILOT STUDY

A pilot study is defined as a small - scale version or trial run of the major study **(J.Sharma2013).** After obtaining permission from the concerned authority at Thirunangai Mempattu Sangam at Vellore.

- Duration of pilot study was one week (18.07.2015 to 25.07.2015) 5 samples were selected by using simple random sampling technique.

- Confidentiality was assured among study participants. Pre test done on first day by using structured questionnaire based on knowledge, attitude, expressed safe sex behavior among 5 samples. After that, sexual health approach was carried out by the researcher.

- One week later post test was conducted for transgender.

- Data analysis was done using descriptive and inferential statistics.

- The finding of pilot study revealed that the pre test knowledge mean score was 16.4, whereas post test mean score was 22.6, pre test attitude mean score was 29.2, whereas post test mean score was 42.2, pre test expressed safe sex behavior mean score was 36.4, whereas posttest mean score was 49 , there was a significant difference between pre and post test knowledge mean score which was 6, attitude mean score which was 13, expressed safe sex behavior mean score which was 12.6, suggested that sexual health approach was effective among transgenders. There was significant association with the post test scores and selected demographic variables.

RELIABILITY

Reliability is defined as the extent to which the instrument yields the same results on repeated measure, concerned with consistency, accuracy, stability and homogeneity. The knowledge, attitude, expressed safe sex behavior scale was administered to 5 Transgenders, by test and retest method to obtain the reliability of the tool. Since the co-efficient correlation of knowledge was 1.00, attitude was 0.99, and expressed safe sex behavior was 0.99, the tool was found to be highly reliable.

VALIDITY

Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure **(Polit&Beck2013).** The content validity of the tool was obtained from several experts in the field of Medical Surgical Nursing & statistics. Initially section A consisted of 13 demographic variables, out of which 11 variables had 100% validated, 2 items were removed from the demographic variables. In section B the total items in knowledge questionnaire were reduced from 30 to 25, attitude items were reduced from 20 to 10, safe sex behavior items were reduced from 25 to 15, Based on the experts opinion the above necessary changes were made in section B.

DATA COLLECTION PROCEDURE

In order to collect the data for the study, the investigator obtained permission from specify authority Thirunangai Mempattu Sangam at Vellore. According to the inclusion criteria, samples were selected based on simple random sampling technique, Confidentiality was assured to the participants and informed consent was obtained. The main study was conducted from 01.08.15 to 22.08.15. The researcher developed a rapport with the participants and explained the purpose of the study. The demographic

variables of subjects were filled by the participants. Pretest was conducted to assess their knowledge, attitude, expressed safe sex behavior scale was administered to each participant. Following this, sexual health approach was administered on the same day by using lecture on general information about HIV/AIDS, video shows on positive attitude among transgenders HIV/AIDS, Demonstration on condom usage for expressed safe sex practice, pamphlet distribution., posttest was carried out for the same groups after a 7 days to assess the knowledge, attitude, expressed safe sex behavior by using the same questionnaire.

PLAN FOR DATA ANALYSIS

Data obtained analyzed in view of objectives of the study using descriptive and inferential statistics. The plan of data analysis is as follows.

Descriptive statistics:

- Frequency and percentage distribution will be used to analyze the selected demographic variables.
- Mean and standard deviation will be used to assess the level of knowledge, attitude and expressed safe sex behaviour.

Inferential statistics:

- Paired ‘t’test will be used to assess the effectiveness of sexual health approach on Knowledge, attitude and expressed safe sex behaviour and selected demographic variables.
- ‘Chi’ square will be used to assess the association between post test scores of knowledge, attitude and expressed safe sex behaviour and selected demographic variables.

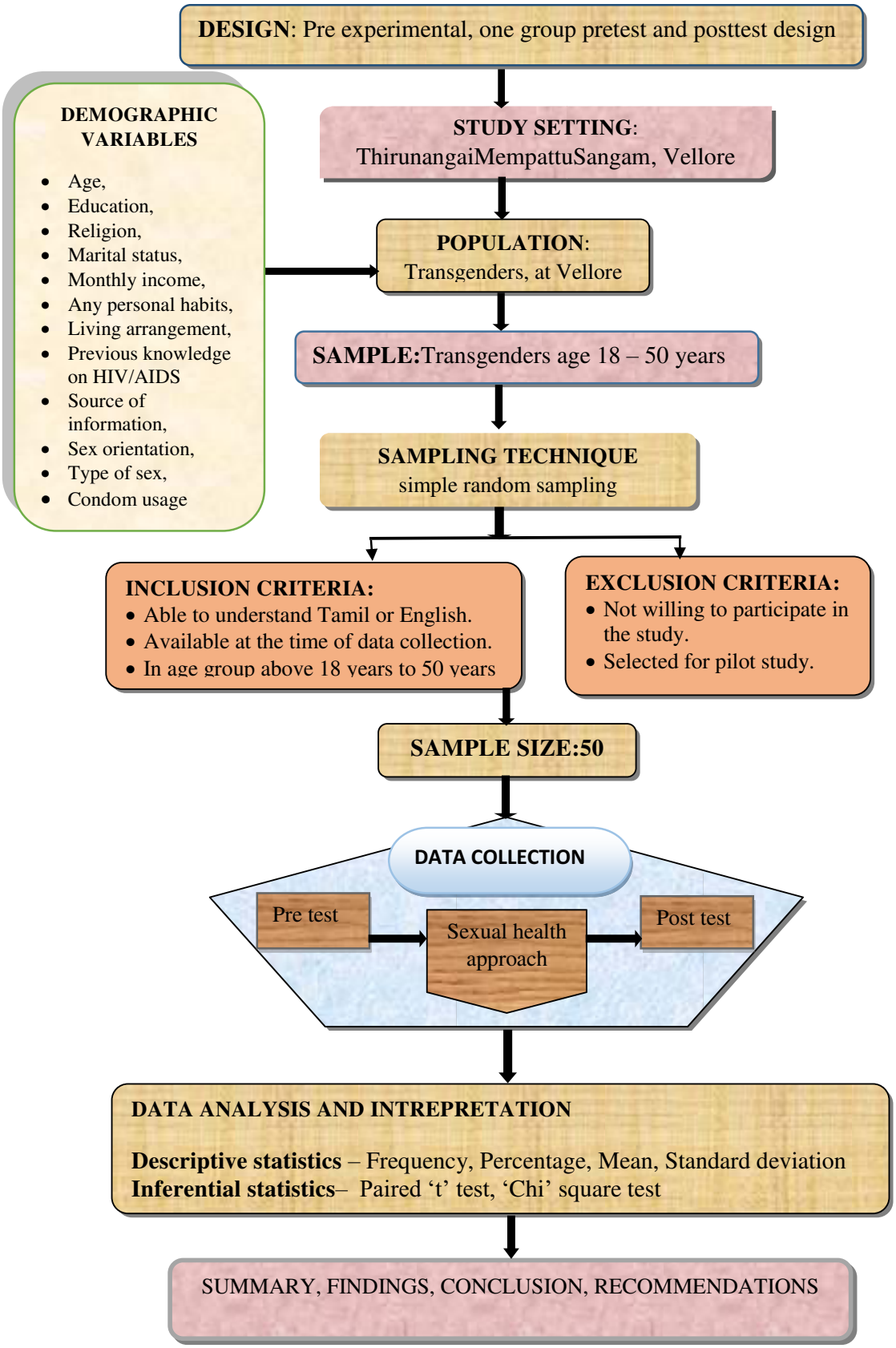


FIG: 2 SCHEMATIC REPRESENTATION OF RESEARCH METHOLOGY

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

Data was obtained on Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among Transgenders at selected welfare society, Vellore. The demographic variables were coded and analyzed. Analysis and interpretation was done with the help of descriptive and inferential statistics to meet the objectives of the study. The data were processed and analyzed on the basis of the objectives and hypotheses. The data were tabulated, analyzed and interpreted using descriptive and inferential statistics.

This chapter includes four sections. The results and analysis are presented in the following order.

ORGANIZATION OF DATA

Section I : Distribution of Demographic variables of Transgenders at welfare Society, Vellore.

Section II : Assessment of pre test and post test on knowledge, attitude, safe sex behavior regarding HIV/AIDs among Transgenders at welfare society, Vellore

Section III : Effectiveness of sexual health approach on knowledge, attitude and Expressed safe sex behavior regarding HIV/AIDS among Transgenders at welfare society, Vellore.

Section IV : Association between the posttest levels of knowledge, attitude, expressed safe sex behavior among Transgenders and selected demographic variables.

Section I

Distribution of demographic variables of transgenders

Table - 1: Frequency and percentage distribution of Transgenders according to Age (in years)

n=50

Age (in years)	Frequency(n)	Percentage (%)
18 - 20	17	34
21 - 30	17	34
31 - 40	11	22
above 40	5	10

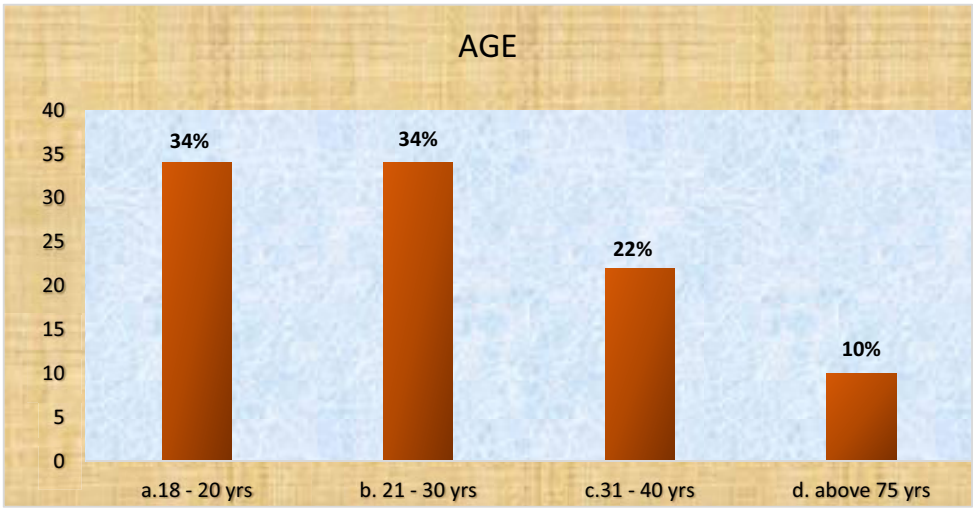


Fig No 3: Column graph showing percentage distribution of transgenders according to age group.

The data presented in the above table 1 and Figure 3 shows that the most of them 17(34%) transgender were in the age group of 18 – 20 years and 21 – 30 years, 11(22%) between the age group 31 – 40 years, only 5(10%) were of the age group above 40 years.

Table – 2: Frequency and percentage distribution of Transgenders according to education.

n=50

Education	Frequency(n)	Percentage (%)
No formal education	7	14
Primary education	8	16
Secondary education	13	26
Higher Education	10	20
Diploma	7	14
Graduate	5	10

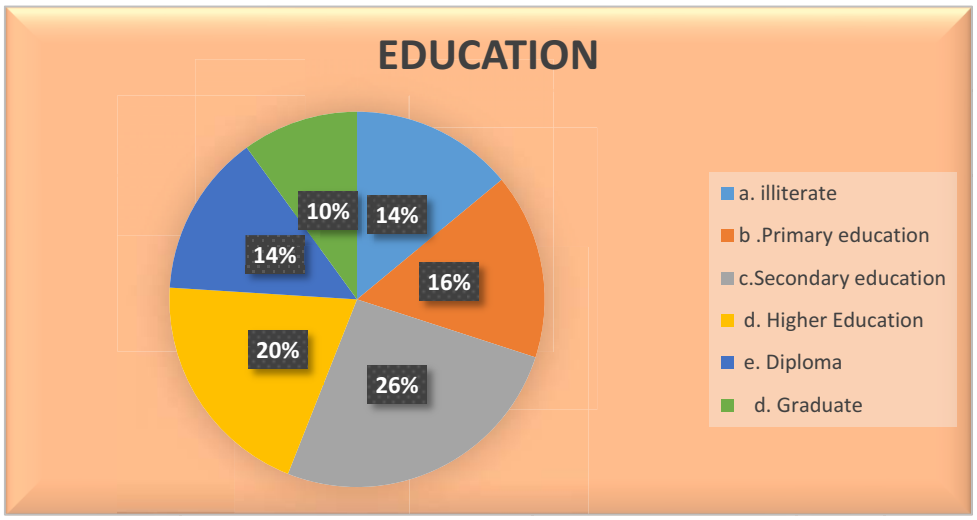


Fig No 4: Pie chart showing percentage distribution of transgenders according to education.

The data presented in the above table 2 and the Figure 4 shows that most of the study participants 13(26%) were secondary education, 10(20%) studied up to Higher education, 8(16%) were in primary education, 7(14%) studied up to Diploma, 5(10%) were in graduate.

Table – 3: Frequency and percentage distribution of transgenders according to Religion

n=50

Religion	Frequency(n)	Percentage (%)
Hindu	45	90
Muslim	0	0
Christian	5	10
Others	0	0

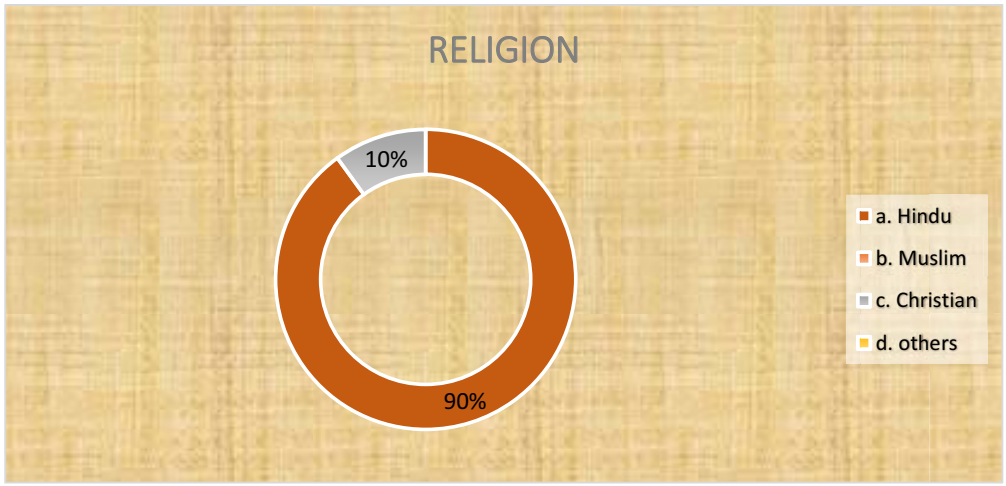


Fig No - 5: Pie chart showing percentage distribution of transgenders according to Religion

The table 3 and the Figure 5 shows that majority of the study participants 45(90%) were Hindu, 5(10%) were Christians.

Table – 4: Frequency and percentage distribution of transgenders based on Marital status

n=50

Marital status	Frequency(n)	Percentage (%)
Married	8	16
Unmarried	33	66
Widow	0	0
Separated	4	8
Any other	5	10

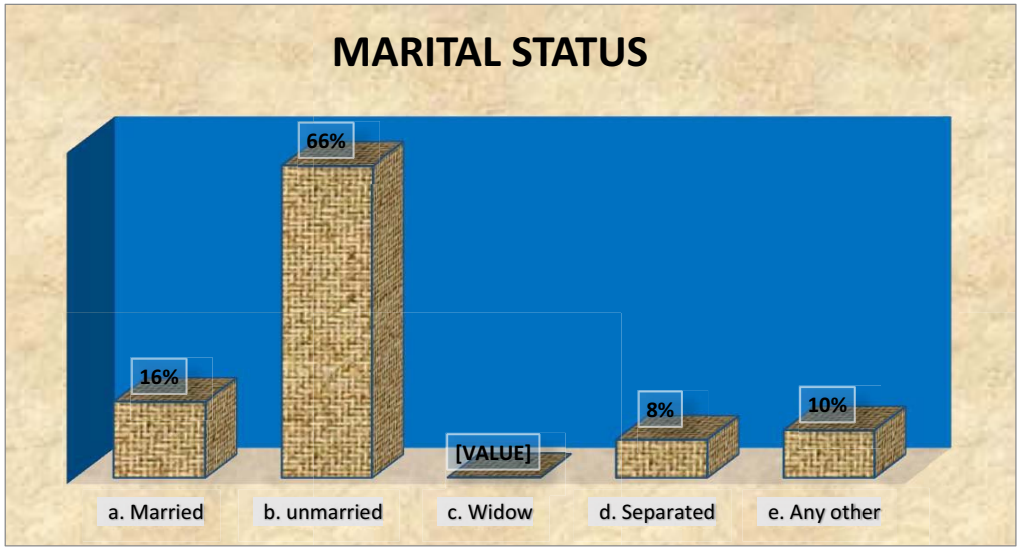


Fig No - 6: Column graph showing percentage distribution of transgenders based on marital status

The table 4 and the Figure 6 shows that most of the study participants 33(66%) are unmarried, and 8(16%) were married, and 5(10%) were any other, and 4(8%) were separate.

Table – 5: Frequency and percentage distribution of Transgenders according to monthly income

n = 50

Monthly Income(Rs)	Frequency(n)	Percentage (%)
3000 – 4000	26	52
4001 -5000	10	20
5001 - 6000	8	16
6001 - 7000	6	12

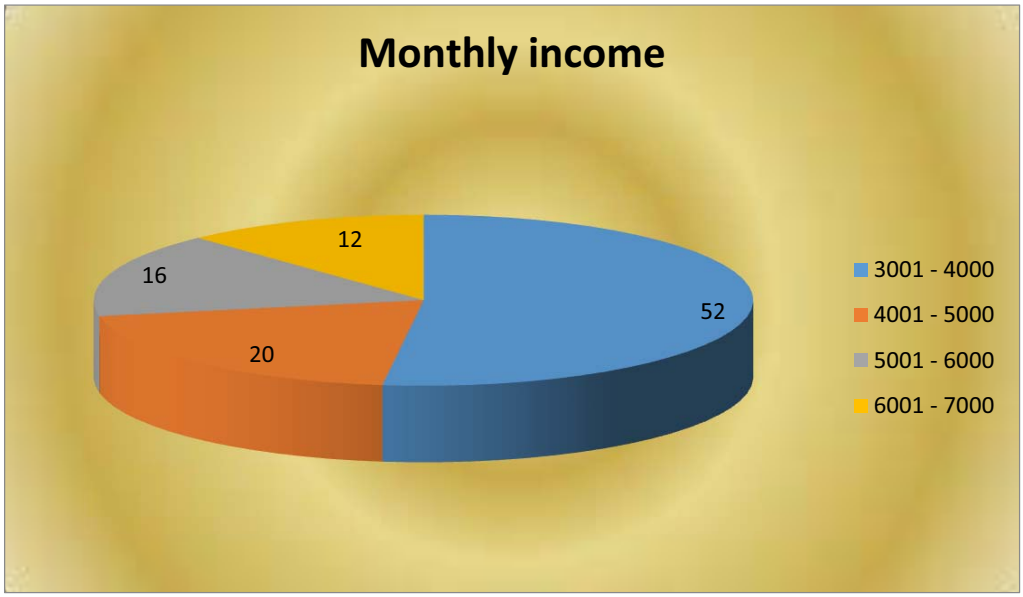


Fig No - 7: pie chart showing percentage distribution of transgenders according to Monthly income

The table 5 and Figure 7 shows that most of the study participants 26(52%) were getting monthly income of 3000 – 4000, 10(20%) were getting monthly income of 4001 -5000, 8(16%) were getting monthly income of 5001 – 6000, and 6(12%) were getting monthly income of 6001 – 7000**.**

Table 6: Frequency and percentage distribution of Transgenders based on any personal habits.

n = 50

Any personal habits	Frequency(n)	Percentage (%)
Smoking	10	20
Alcohol	19	38
Drug abuse	0	0
Pan chewing	21	42

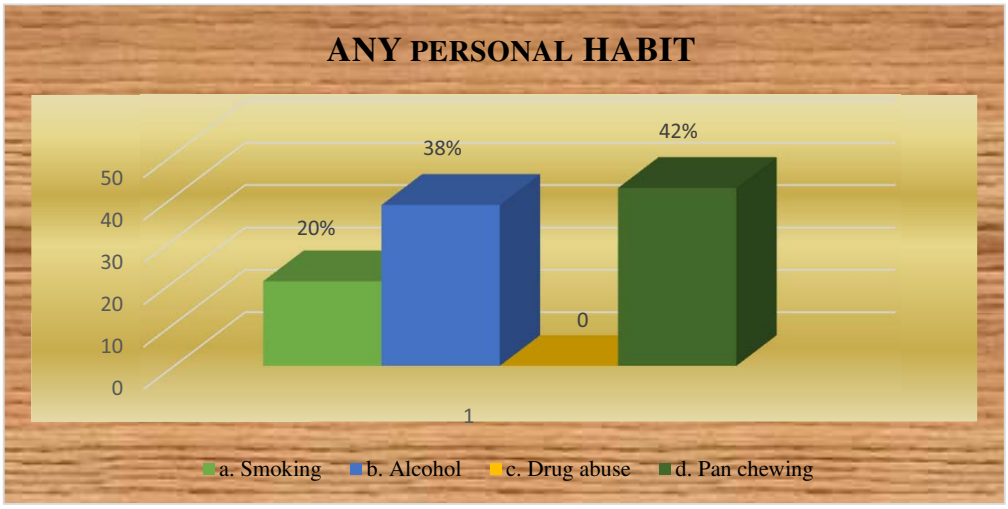


Fig No - 8: Column graph showing percentage distribution of transgenders based on any personal habits.

The table 6 and Figure 8 shows that most of the study participants 21(42%) were having the habit of pan chewing, 19(38%) were having habit of alcohol, 10(20%) were having the habit of smoking.

Table - 7: Frequency and percentage distribution of transgenders based on living arrangement.

n = 50

Living arrangement	Frequency(n)	Percentage (%)
With family	22	44
With neighbor	9	12
With friends	14	28
Any others	8	16

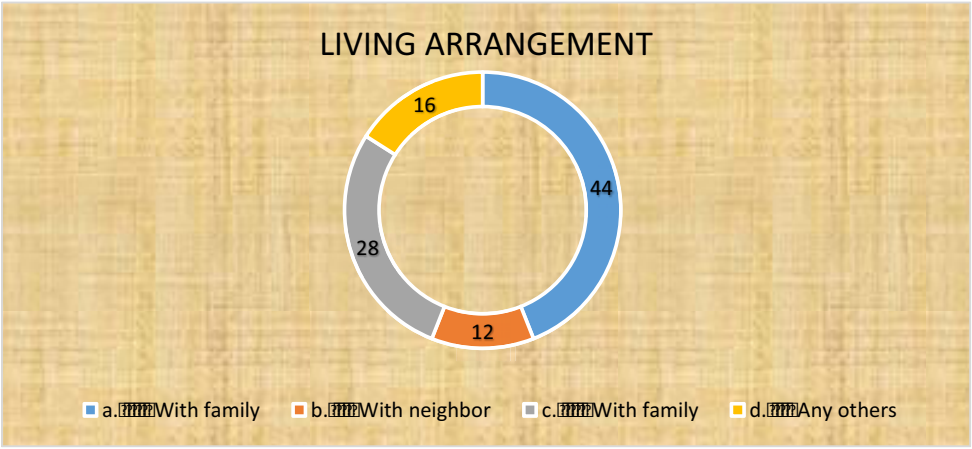


Fig No - 9: Pie chart showing percentage distribution of transgenders based on living arrangement

The table 7 and Figure 9 shows that majority of the study participants 22(44%) were living with their family, 14(28%) were living with friends, 9(12%) were living with neighbor, 8(16%) were living with others.

Table - 8: Frequency and percentage distribution of transgenders according to previous knowledge on HIV/AIDS.

n = 50

Previous knowledge on HIV/AIDS	Frequency(n)	Percentage (%)
Mass Media	10	20
Health professionals	28	56
Through friends & relatives	8	16
others	4	8

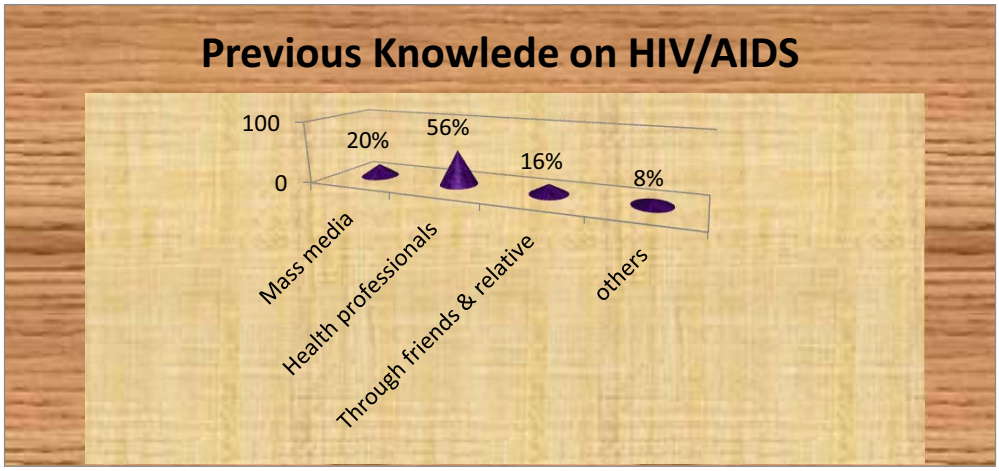


Fig No - 10: Cone graph showing percentage distribution of transgenders according to previous knowledge on HIV/AIDS.

The table 8 and Figure 10 shows that most of study participant 28(56%) were had previous knowledge on HIV/AIDS through Health professionals, 10(20%) were had previous knowledge through mass media, 8(16%) were had previous knowledge through friends and relatives, 4(8%) were had through others.

Table - 9: Frequency and percentage distribution of transgenders according to Sex orientation.

n=50

Sex orientation	Frequency(n)	Percentage (%)
Heterosexual	18	36
Homosexual	21	42
Bisexual	11	22
Any other	0	0

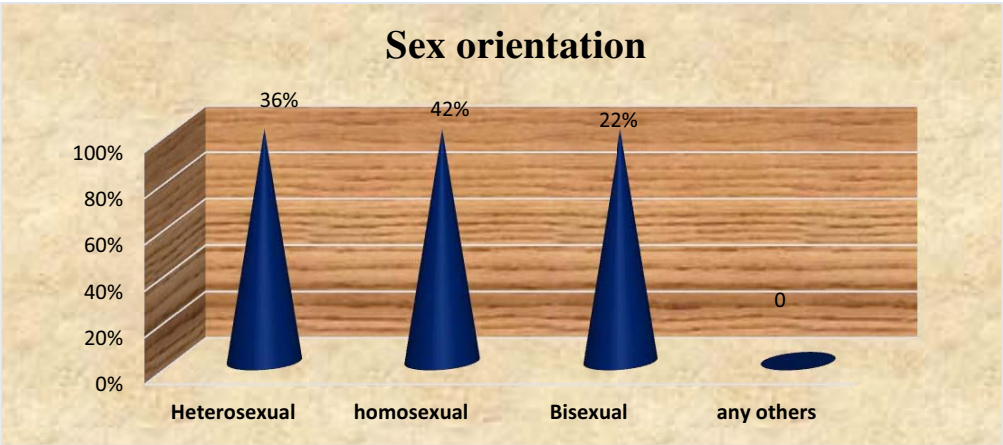


Fig No -11: Cone graph showing percentage distribution of transgenders according to Sex orientation.

The table.9 and Figure 11 shows that most of the study participants 21(42%), were sex orientation of homosexual, 18(36%) were sex orientation of heterosexual, 11(12%) were sex orientation of bisexual.

Table – 10: Frequency and percentage distribution of transgenders according to Type of sex

n=50

Type of sex	Frequency	Percentage (%)
Vaginal/ Anal	27	54
Anal/ Oral	23	46
Oral/ Vagina	0	0
Masturbation	0	0

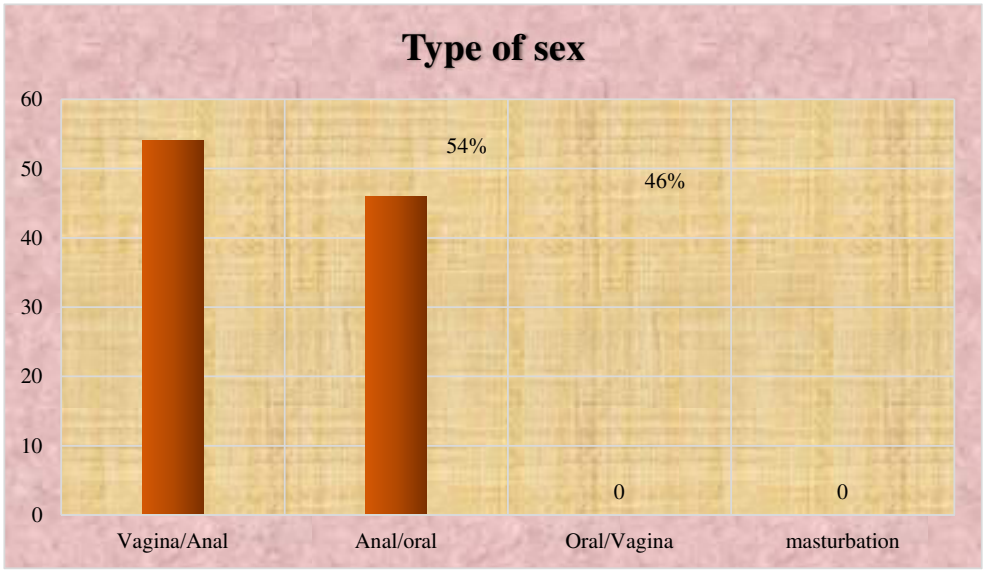


Fig No - 12: Column graph showing percentage distribution of transgenders according to type of sex.

The table 10 and Figure 12 shows that most of the study participants27 (54%) they were in vaginal/Anal type of sex, 23(46%) were in Anal/oral type of sex.

Table - 11: Frequency and percentage distribution of transgenders according to condom usage. **n =50**

condom usage	Frequency(n)	Percentage (%)
Yes	45	90
NO	5	10

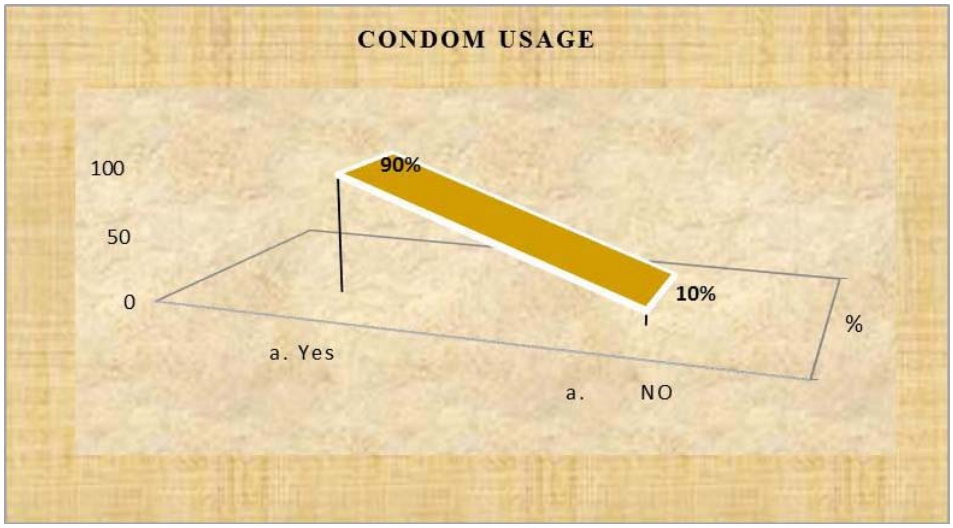


Fig No - 13: Column graph showing percentage distribution of transgenders according to condom usage.

The table 11 and Figure 13 shows that most of the study participants 45(90%) were using condom. 5(10%) were not using condom.

Section: II

Assessment of pretest and posttest sexual health approach on knowledge, attitude, expressed safe sex behavior regarding HIV/AIDs among Transgenders

Table - 12: Analysis of pretest and post test score of Knowledge regarding HIV/AIDS among Transgenders **n = 50**

S.NO	Knowledge	Pre test		Post test	
		no	%	no	%
1	Inadequate knowledge	6	12	0	0
2	Moderate Knowledge	42	84	6	12
3	Adequate knowledge	2	4	44	88

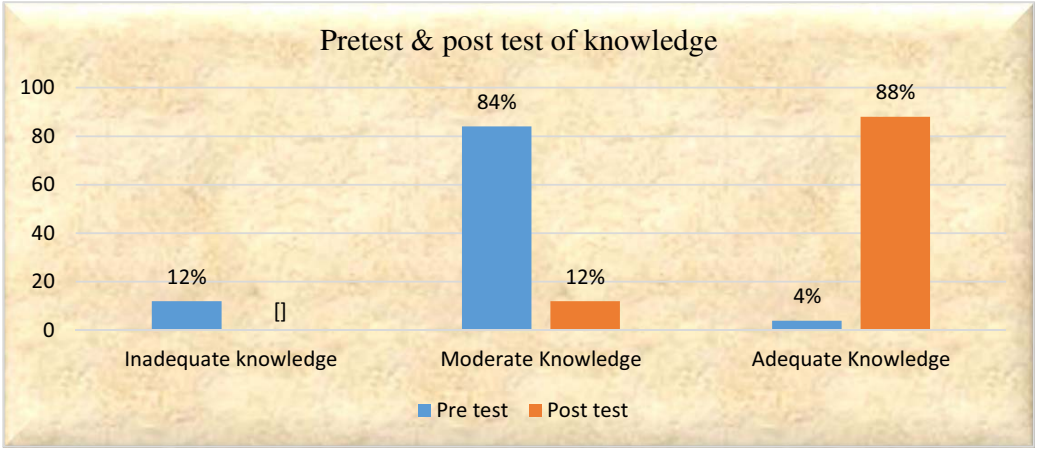


Fig No - 14: Analysis of pretest and post test score of knowledge regarding HIV/AIDS among Transgenders

The table 12 and Figure 14 shows that before the sexual health approach, majority of the study participants had 42(84%) were moderately knowledge, 6(12%) were inadequate knowledge, and 2(4%) had Adequate knowledge. After sexual Health Approach 44(88%) had Adequate knowledge, 6(12%) had moderate knowledge.

Table - 13: Analysis of pretest and post test score of Attitude regarding HIV/AIDS among Transgenders **n = 50**

S.NO	Attitude	Pre test		Post test	
		No	%	No	%
1	Unfavorable Attitude	10	20	0	0
2	Moderatly favorable Attitude	40	80	10	20
3	Favorable Attitude	0	0	40	80
	Total	50	100	50	100

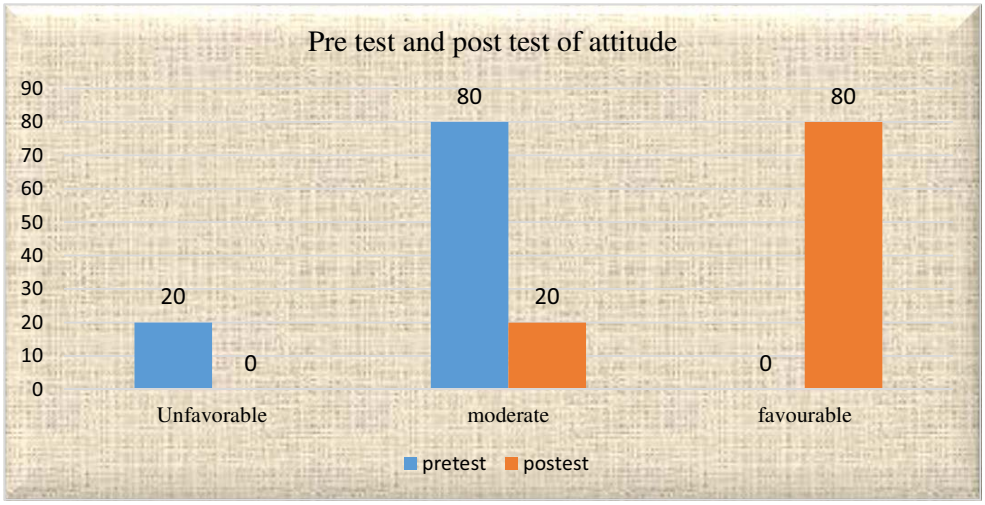


Fig No - 15: Analysis of pretest and post test score of Attitude regarding HIV/AIDS among Transgenders

The table 13 and Figure 15 shows that before the sexual health approach, majority of the study participants 40(80%) had moderatly favorable attitude and 10(20%)were having unfavorable attitude, After the sexual health approach 40(80%) were having favorable attitude, and 10(20%) were processing in moderate favorable attitude.

Table - 14: Analysis of pretest and post test score of expressed safe sex behavior regarding HIV/AIDS among Transgenders.

n = 50

S.NO	Expressed safe sex behavior	Pre test		Post test	
		No	%	No	%
1	Unsatisfactory expressed safe sex behavior	7	14	0	0
2	Moderate satisfactory expressed safe sex behavior	43	86	8	16
3	Satisfactory expressed safe sex behavior	0	0	42	84

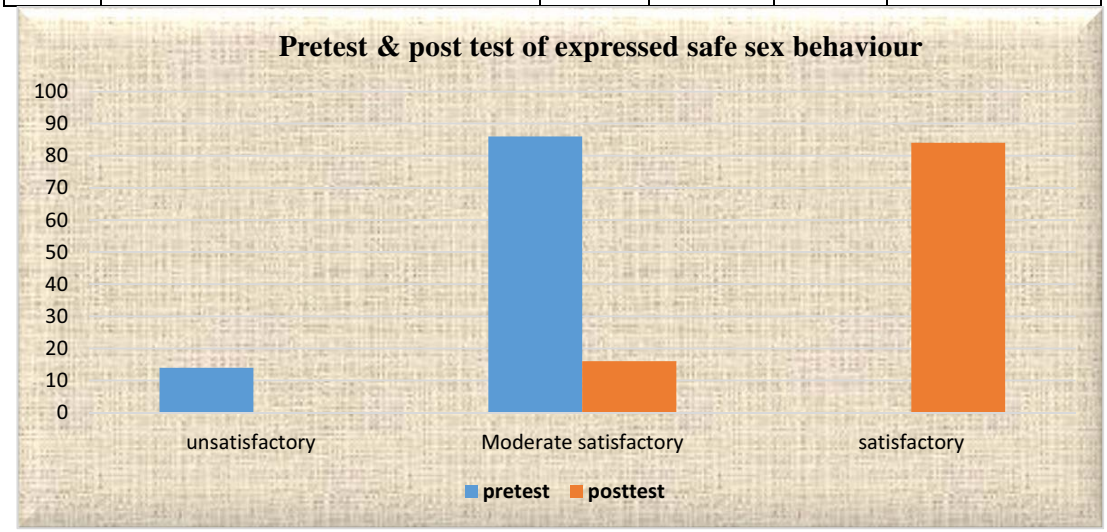


Fig No - 16: Analysis of pretest and post test score of expressed safe sex behavior regarding HIV/AIDS among Transgenders

The table 14 and Figure 16 shows that before the sexual health approach, majority of the study participants 43(86%) had moderate satisfactory expressed safe sex behavior, 7(14%) were had unsatisfactory expressed safe sex behavior, after sexual health approach majority of study participant42 (84%) were had satisfactory expressed safe sex behavior, 8(16%) had moderate satisfactory expressed safe sex behavior.

SECTION C:

Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among transgenders

Table - 15: Comparison of Pre and Posttest mean scores on Knowledge regarding HIV/AIDS among transgenders.

n= 50

S.No.	Knowledge	Mean	Standard Deviation	Mean difference	Paired 't' test
1.	Pre test	15.04	3.06	5.56	40.88* (3.496)
2.	Post test	20.6	2.72		

Note *statistically significant (p<0.001)

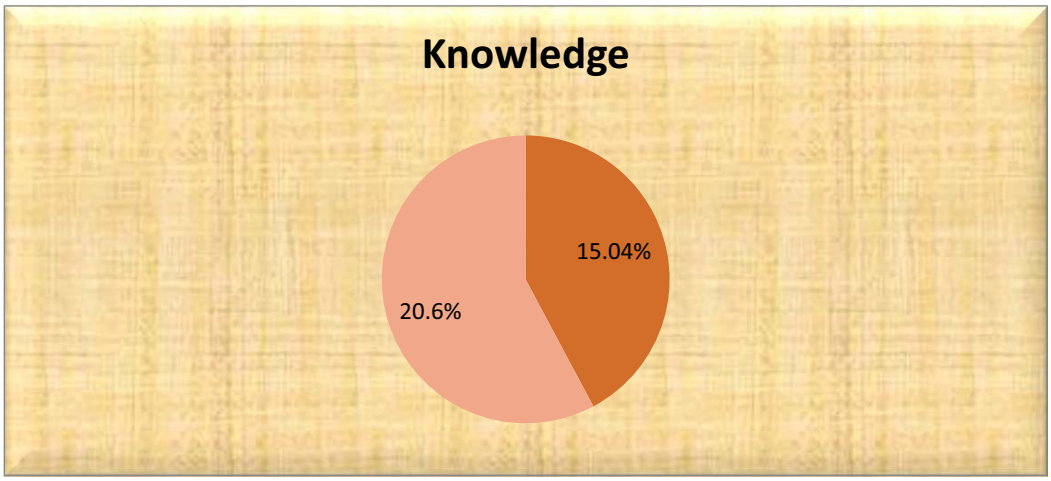


Fig No - 17: Comparison of Pre and Posttest mean scores on Knowledge regarding HIV/AIDS among transgenders.

The above table 15 and Figure 17 shows that pretest mean score was calculated as 15.04 ± 3.06. After sexual health approach posttest mean score is 20.6 ± 2.72.The calculated paired't'test value (40.88) is greater than that of the table value, (3.496) (p<0.001). There is high improvement of Knowledge scores among transgenders after sexual health approach.

Table - 16: Comparison of Pre and Posttest mean scores on Attitude regarding HIV/AIDS among transgenders.

n= 50

S.No.	Attitude	Mean	Standard Deviation	Mean difference	Paired 't' test
1.	Pre test	30.6	15.92	11.36	34.36* (3.496)
2.	Post test	41.96	16.24		

Note *statistically significant (p<0.001)

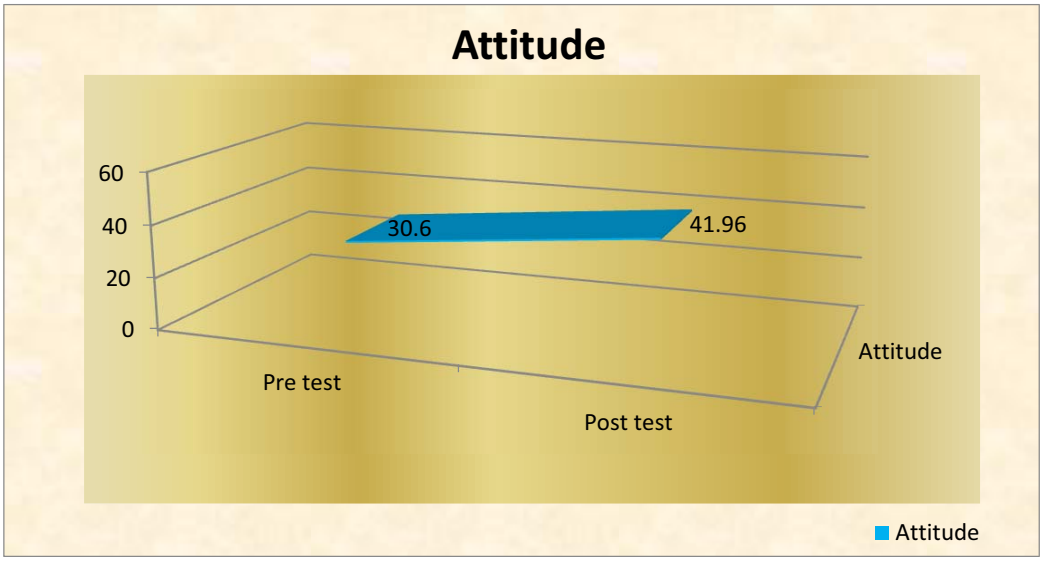


Fig No - 18: Comparison of Pre and Posttest mean scores on attitude regarding HIV/AIDS among transgender.

The above table 16 and Figure 18 shows that pretest mean score is 30.6 ± 15.92. After sexual health approach posttest mean score is 41.96 ± 16.24.The calculated paired't' test value (34.36) is greater than that of the table value, (3.496) (p<0.001). There is high improvement of Knowledge scores among transgenders after sexual heath approach.

Table - 17: Comparison of Pre and Posttest mean scores on expressed safe sex behavior regarding HIV/AIDS among transgenders.

n= 50

S.No.	Expressed safe sex behavior	Mean	Standard Deviation	Mean difference	Paired 't' test
1.	Pre test	37.2	20.32	12.68	32.93* (3.496)
2.	Post test	49.88	15.91		

Note *statistically significant (p<0.001)

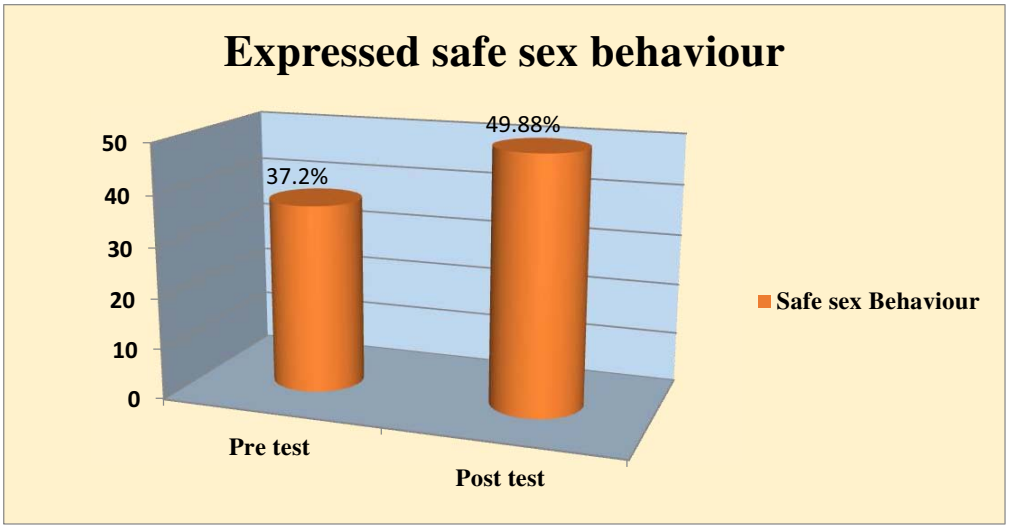


Fig No - 19: Comparison of Pre and Posttest mean scores on expressed safe sex behavior regarding HIV/AIDS among transgender.

The above table 17 and Figure 19 shows that pretest mean score is 37.2 ± 20.32.After sexual health approach the post test mean value is 49.88 ± 15.91. The paired 't' value (32.93) is greater than that of the table value (3.496) (p<0.001). This shows that sexual health approach is effective in improving expressed safe sex behavior among Transgenders.

SECTION: D

Association between the post- test levels of Knowledge, Attitude, expressed safe sex behaviour among transgenders and selected demographic variables.

Table - 18: Association between the post- test levels of Knowledge, among transgenders and selected demographic variables

n=50

Demographic variables	Sample(n)		Knowledge						'Chi' Square Value X^2
	NOS	%	Inadequate		Moderate		Adequate		
			No	%	No	%	No	%	
1.Age 18 - 20	17	34	-	-	5	10	12	24	**21.32* df =6 (12.59) S**
21 - 30	17	34	-	-	-	-	17	34	
31 - 40	11	22	-	-	1	2	10	20	
>40	5	10	-	-	-	-	5	10	
2. Education No formal education	7	14	-	-	3	6	4	8	11.88 df = 10 (18.30) NS
Primary education	8	16	-	-	-	-	8	16	
Secondary education	13	18	-	-	3	6	10	20	
Higher education	10	24	-	-	-	-	10	20	
Diploma	7	12	-	-	-	-	7	14	
Graduate	5	22	-	-	-	-	5	10	
3.Religion Hindu	45	90	-	-	6	12	39	78	0.149 df = 6 (12.59) NS
Muslim	-	-	-	-	-	-	-	-	
Christian	5	10	-	-	-	-	5	10	
Others	-	-	-	-	-	-	-	-	
4. Marital status Married	8	16	-	-	1	2	7	14	**45.92* df =8 (15.50) S**
Unmarried	33	66	-	-	3	6	30	60	
Widow	-	-	-	-	-	-	-	-	
Separated	4	8	-	-	-	-	4	8	
Any others	5	10	-	-	2	4	3	6	

5. Monthly income(Rs)									
3001 -4000	26	52	-	-	3	6	23	46	2.11 df = 6 (12.59) NS
4001 – 5000	10	20	-	-	1	2	9	18	
5001 – 6000	8	16	-	-	2	4	6	12	
6001 – 7000	6	12	-	-	-	-	6	12	
6.Any personal Habits									
Smoking	10	20	-	-	2	4	8	16	1.87 df = 6 (12.59) NS
Alcohol	19	38	-	-	3	6	16	32	
Drug abuse	-	-	-	-	-	-	-	-	
Pan chewing	21	42	-	-	1	2	20	40	
7.Living arrangement									
With family	22	44	-	-	6	12	16	32	8.61* df = 6 (12.59) NS
With Neighbour	6	12	-	-	-	-	6	12	
With friends	14	28	-	-	-	-	14	28	
Any others	8	16	-	-	-	-	8	16	
8.Previous knowledge on HIV/AIDS									
Mass media	10	20	-	-	-	-	10	20	6.9 df = 6 (12.59) NS
Health professionals	28	56	-	-	3	6	25	50	
Through friends & Relatives	8	16	-	-	1	2	7	14	
Others	4	8	-	-	2	4	2	4	
9.Sex orientation									
Heterosexual	18	36	-	-	1	2	17	34	1.17 df = 6 (12.59) NS
Homosexual	21	42	-	-	3	6	18	36	
Bisexual	11	22	-	-	2	4	9	18	
Any others	-	-	-	-	-	-	-	-	

10.Type of sex Vagina/Anal	27	54	-	-	4	28	23	46	0.41 df = 6 (12.59) NS
Anal/oral	23	46	-	-	2	4	21	42	
Oral / vagina	-	-	-	-	-	-	-	-	
Masturbation	-	-	-	-		-	-	-	
11. condom usage Yes	45	90	-	-	3	6	42	84	**12.1* df – 2 (12.1) S**
No	5	10	-	-	3	6	2	4	

Note: S = Significant, (*= p<0.05) and NS= Not Significant.

Table – 18: represents the statistical outcome of 'chi' square analysis. It was used to find out the association between post test score of knowledge and selected demographic variables. The results revealed that age, marital status, using condom are statistical significant at (p<0.05). whereas education, religion, monthly income, living arrangement, personal habit, previous knowledge, sex orientation, type of sex, are not significant at (p<0.05)level.

Hence it is interpreted that the difference in mean score value related to the demographic variables were only by chance and not true and the hypothesis H_4 was accepted.

Table - 19: Association between the post- test levels of Attitude, among transgenders and selected demographic variables

n = 50

Demographic variables	Sample(n)		Attitude						'Chi' Square Value X^2
	Nos	%	Unfavorable		Moderate		Favorable		
			No	%	No	%	No	%	
1.Age 18 - 20	17	34	-	-	6	12	11	22	4.36 df = 6 (12.59) NS
21 - 30	17	34	-	-	2	4	15	30	
31 - 40	11	22	-	-	2	4	9	18	
>40	5	10	-	-	-	-	5	10	
2. Education No formal education	7	14	-	-	5	10	2	4	17.91 df= 10 (18.30) NS
Primary education	8	16	-	-	3	6	5	10	
Secondary education	13	26	-	-	1	2	12	24	
Higher education	10	20	-	-	1	2	9	18	
Diploma	7	14	-	-	-	-	7	14	
Graduate	5	10	-	-	-	-	5	10	
3.Religion Hindu	45	90	-	-	9	18	36	72	0.71 df = 6 (12.59) NS
Muslim	-	-	-	-	-	-	-	-	
Christian	5	10	-	-	1	2	4	8	
Others	-	-	-	-	-	-	-	-	
4.Marital status Married	8	16	-	-	1	2	7	14	2.39 df = 8 (15.50) NS
Unmarried	33	66	-	-	6	12	27	54	
Widow	-	-	-	-	-	-	-	-	
Separated	4	8	-	-	1	2	3	6	
Any others	5	10	-	-	2	4	3	6	

5.Monthly income(Rs) 3001 -4000	26	52	-	-	5	10	21	42	2.14 df = 6 12.59 NS
4001 – 5000	10	20	-	-	3	6	7	14	
5001 – 6000	8	16	-	-	2	4	6	12	
6001 – 7000	6	12	-	-	-	-	6	12	
6.Any personal Habits Smoking	10	20	-	-	4	8	6	12	3.86 df = 6 (12.59) NS
Alcohol	19	38	-	-	4	8	15	30	
Drug abuse	-	-	-	-					
Pan chewing	21	42	-	-	2	4	19	38	
7.Living arrangement With family	22	44	-	-	8	16	14	28	7.4 df = 6 (12.59) NS
With Neighbour	6	12	-	-	-	-	6	12	
With friends	14	28	-	-	2	4	12	24	
Any others	8	16	-	-	-	-	8	16	
8.Previous knowledge on HIV/AIDS Mass media	10	20	-	-	-	-	10	20	6.34 df = 6 (12.59) NS
Health professionals	28	56	-	-	5	10	23	46	
Through friends & Relatives	8	16	-	-	3	6	5	10	
Others	4	8	-	-	2	4	2	4	
9.Sex orientation Heterosexual	18	36	-	-	1	2	17	43	3.47 df = 6 (12.59) NS
Homosexual	21	42	-	-	6	12	15	30	
Bisexual	11	22	-	-	3	6	8	16	
Any others	-	-	-	-	-	-	-	-	
10.Type of sex Vagina/Anal	27	54	-	-	6	12	21	42	0.15 df = 6 (12.59) NS
Anal/oral	23	46	-	-	4	8	19	38	
Oral / vagina	-	-	-	-	-	-	-	-	
Masturbation	-	-	-	-	-	-	-	-	
11. Are you using condom Yes	45	90	-	-	5	10	40	80	**22.21* df = 2 (5.99) S**
No	5	10	-	-	5	10	-	-	

Note: S = Significant, (*= $p<0.05$) and NS= Not Significant.

Table 19 represents the statistical outcome of 'chi' square analysis. It was used to find out the association between post test score of Attitude and selected demographic variables. The study revealed that using condom are statistical significant at ($p<0.05$). The results revealed that age, education, religion, marital status, monthly income, personal habit, living arrangement, previous knowledge, sex orientation, type of sex, are whereas are not significant at ($p<0.05$)level.

Hence it is interpreted that the difference in mean score value related to the demographic variables were only by chance and not true and the hypothesis H_5 was accepted.

Table - 20: Association between the post- test levels of expressed safe sex Behaviour, among transgender and selected demographic variables.

n = 50

Demographic variables	Sample(n)		Expressed safe sex behavior						'Chi' square Value X^2
	Nos	%	Unsatisfactory		Moderate satisfactory		satisfactory		
			No	%	No	%	No	%	
1.Age 18 - 20	17	34	-	-	5	10	12	24	11.11 df = 6 (12.59) NS
21 - 30	17	34	-	-	-	-	17	34	
31 - 40	11	22	-	-	1	2	10	20	
>40	5	10	-	-	2	4	3	6	
2. Education No formal education	7	14	-	-	2	4	5	10	5.1 df = 10 (18.30) NS
Primary education	8	16	-	-	4	8	4	8	
Secondary education	13	26	-	-	1	2	12	24	
Higher education	10	20	-	-	1	2	9	18	
Diploma	7	14	-	-	-	-	7	14	
Graduate	5	10	-	-	-	-	5	10	
3.Religion Hindu	45	90	-	-	8	16	37	74	1.04 df = 6 (12.59) NS
Muslim	-	-	-	-	-	-	-	-	
Christian	5	10	-	-	-	-	5	10	
Others	-	-	-	-	-	-	-	-	
4.Marital status Married	8	16	-	-	4	8	4	8	4.45 df = 8 (15.50) NS
Unmarried	33	66	-	-	4	8	29	58	
Widow	-	-	-	-	-	-	-	-	
Separated	4	8	-	-	-	-	4	8	
Any others	5	10	-	-	-	-	5	10	
5.Monthly income(Rs) 3001 -4000	26	52	-	-	5	10	21	42	1.51 df = 6 (12.59) NS
4001 – 5000	10	20	-	-	2	4	8	16	
5001 – 6000	8	16	-	-	1	2	7	14	
6001 – 7000	6	12	-	-	-	-	6	12	

6.Any personal Habits Smoking	10	20	-	-	2	4	8	16	O.14 df = 6 (12.59) NS
Alcohol	19	38	-	-	3	6	16	32	
Drug abuse	-	-	-	-	-	-	-	-	
Pan chewing	21	42	-	-	3	6	18	36	
7.Living arrangement With family	22	44	-	-	6	12	16	32	6.34 df = 6 (12.59) NS
With Neighbour	6	12	-	-	-	-	6	12	
With friends	14	28	-	-	-		14	28	
Any others	8	16	-	-	2	4	6	12	
8.Previous knowledge on HIV/AIDS Mass media	10	20	-	-	-	-	10	20	5.48 df = 6 (12.59) NS
Health professionals	28	56	-	-	5	10	23	46	
Through friends & Relatives	8	16	-	-	3	6	5	10	
Others	4	8	-	-	-	-	4	20	
9.Sex orientation Heterosexual	18	36	-	-	3	6	15	30	0.53 df = 6 (12.59) NS
Homosexual	21	42	-	-	4	8	17	34	
Bisexual	11	22	-	-	1	2	10	20	
Any others	-	-	-	-	-	-	-	-	
10.Type of sex Vagina/Anal	27	54	-	-	6	12	21	42	1.67 df = 6 (12.59) NS
Anal/oral	23	46	-	-	2	4	21	42	
Oral / vagina	-	-	-	-	-	-	-	-	
Masturbation	-	-	-	-	-	-	-		
11. Are you using condom Yes	45	90	-	-	5	10	40	80	**7.99* df = 2 (5.99) S**
No	5	10	-	-	3	6	2	4	

Note: S = Significant, (*= p<0.05) and NS= Not Significant.

Table 20 represents the statistical outcome of 'chi' square analysis. It was used to find out the association between post test score of expressed safe sex behavior and selected demographic variables. The results revealed that using condom are statistical significant at ($p<0.05$). whereas age, education, religion, marital status, monthly income, personal habit, living arrangement, previous knowledge, sex orientation, type of sex, are not significant at ($p<0.05$)level.

Hence it is interpreted that the difference in mean score value related to the demographic variables were only by chance and not true and the hypothesis H_6 was accepted.

CHAPTER – V

DISCUSSION

This chapter discusses the major findings of the study and reviews them in relation to findings from the results of the previous studies. The present study was aimed to evaluate the effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among transgender at welfare society, Vellore. Simple random sampling technique was used. The Transgenders selected for the study was 50. The sexual health education includes lecturer, demonstration of condom usage was demonstrated by the researcher and it was redemonstrated by the Transgenders. Post test was conducted by the researcher after 7 days.

FINDING OF DEMOGRAPHIC VARIABLES

Out of 50 transgender people the majority 17(34%) were in the age group of 18 – 20 years, 13(26%) were secondary education, 45(90%) were Hindu, 33(66%) are unmarried, 26(52%) were getting monthly income of 3000 – 4000, 21(42%) were having the habit of pan chewing, 22(44%) were living with their family, 28(56%) were had previous knowledge on HIV/AIDS through Health professionals, 21(42%), were sex orientation of homosexual, participants27 (54%) they were vaginal/Anal type of sex, 45(90%) were using condom consistently.

1. The first objective of the study was to assess the pretest knowledge, attitude and expressed safe sex behavior regarding HIV among Transgenders.

Among transgender, who were participating in the study, 50 transgender were selected based on simple random sampling technique to evaluate the effectiveness of sexual health approach on HIV/AIDS. Before the intervention of sexual health approach, the level of knowledge was assessed by 25 itemed structured questionnaire. The result revealed that some of the study participants 6(12%) had inadequate knowledge on HIV/AIDS, 42(84%) had the moderate knowledge, 2(4%) had the adequate knowledge. The attitude was assessed by Standardized 5 point Likert scale (modified from Mohammed Torabi and William Yarber, 1992 attitude scale) modified by researcher. The result revealed that some of the study participants 10(20%) had unfavourable attitude, 40(80%) had moderately favourable attitude. The expressed safe sex behavior was assessed by Standardized 4 point Likert scale (modified from Colleen DiIorio, 2009 safe sex behavior scale)modified by researcher. The results revealed that some of the study participants 7(14%) had unsatisfactory expressed safe sex behavior, 43(86%) had moderate satisfactory expressed safe sex behavior.

This present study was supported by **Hideki Kasuya (2010)** which assessed HIV-related knowledge, attitudes and practices (KAPs) of high school students among 300 unmarried male students through systematic random sampling. The majority of students were aware that HIV can be transmitted by sexual intercourse (97.7%), from mother to child (88.3%) and through sharing needles or syringes (92.0%). Misconceptions about transmission of HIV were observed among 59.3% to 74.3% of respondents. AIDS knowledge proved moderately high between pretest and post test; ($t[35] = 2.88$, $P = 0.007$). Attitudes were significantly more positive at post-

test than at pre-test (t[45] = 3.00, P = 0.004) and The effect for the single item assessing attitude toward safer sex was significant (F[2,64] = 3.32, P = 0.042); a trend was found toward a more favorable attitude toward safer sex between pre- and post-tests (t[48] = 1.92, P = 0.061); in Risk behavior (41%) reported having a primary sexual partner with a median length of 7 years. Four participants (7%) reported having had sex with more than one partner—two (3%) with both male and female partners and only one participant (2%) admitted having had unsafe sex with more than one partner. Because the majority (74%) reported no sexual partners at all, the frequency of sexual activity of the sample as a whole was low. None reported having shared needles.

This study finding was supported by **Bijendra Banjade (2015)** who conducted a cross sectional study to assess knowledge, attitude of HIV/AIDS and sexual practices among 416 MSM. Majority of them had good knowledge of modes of transmission for HIV (90.38%), its prevention (98.09%), curability (97.36%), availability of treatment (89.66%). Laboratory investigations (99.52%), symptoms (61.30%) and contagiousness (98.56%). However, 9.61% were not aware of the fact that HIV and sexually transmitted diseases (STD) spread by MSM act. In attitude the majority of them (97.60%) were sympathetic towards HIV/AIDS patient and almost all were against the removal of HIV/AIDS patient from job. 15.87% of the participants thought that it was not necessary to know the HIV status of their new partner. Majority of them said that MSM should be legalized, with respect to sexual practices of the study population, 56.49% of them had multiple partners. The age at first sexual intercourse was found to be between 10 and 15 age groups among 68% MSM. Friends were the first sexual partners for 67.89% participants. Majority of the married participants were not using a condom with their wives (94.18%) and

FSW (72.97%) though they were using a condom with their male partner (99.28%). Half of the participants were performing both anal and oral form of sexes. 52.50% had either one or other habit.

2. The second objective of the study was to evaluate the effectiveness of sexual health approach on knowledge, attitude and expressed safe sex behavior regarding HIV among transgender.

After the sexual health approach on prevention of HIV/AIDS, the post test was assessed by using the same structured questionnaire on knowledge. The results revealed that some of the study participants 6(12%) had moderate knowledge on HIV/AIDS, 44(88%) had the adequate knowledge. The attitude was assessed by 5 point likert scale. Which revealed that some of the study participants 10(20%) had moderately favourable attitude, 40(80%) had favourable attitude. The expressed safe sex behavior was assessed by 4 point likert scale. The result revealed that some of the study participants 8(16%) moderate satisfactory expressed safe sex behavior, 42(84%) majority had satisfactory expressed safe sex behavior. It indicates that sexual health approach was effective.

Hence the hypothesis H_1, H_2, H_3 is accepted that difference between pre and post test score of knowledge, attitude, expressed safe sex behavior were true difference thus it is interpreted the sexual health approach was effective.

This study is supported by **Robison.E (2015)** who assessed the effectiveness of a sexual health approach to HIV prevention for men who have sex with men (MSM) among 422 were randomly assigned to the intervention group, who participated in a 2-day comprehensive human sexuality seminar on HIV prevention videos. Risk behavior during the preceding 3 months was measured at baseline, 3-

month follow-up, and 12-month follow-up. Of the total, 14%–24% of the participants were considered at risk of acquiring or transmitting HIV. At the 12-month follow-up, the control reported a 29% decrease in the use of condoms during anal intercourse; the intervention group reported an 8% increase (t= 2.546; p= .015). The sexual health seminars appear a promising new intervention at significantly reducing unprotected anal intercourse between men.

This study findings was supported by **Scheltema.K.et.al (2015)**which assessed a high prevalence of human immunodeficiency virus (HIV) and other sexually transmitted infections (STIs) among the transgender community, very little prevention education, which incorporates prevention strategies into comprehensive sexuality education has targeted this population. Transgender participants (N=181) attended the two-day seminar in community-based venues. The curriculum was delivered via lectures, panel discussions, videos, music, exercises and small group discussions. Compared to pre-test values, significant improvements were seen in attitudes toward condom use and in safer sex self-efficacy at post-test, and in attitudes toward condom use, increased monogamy and decreased sexual risk behaviour at three-month follow-up. Alternative interventions need to be developed to target those who, as a result of social marginalization, are less likely to be reached with an intensive seminar-based intervention.

This present study was supported by **Chris Papadopoulos (2015)** a School-based education to assesses the efficacy of sexual health educational programmes. Students having correct knowledge about sexual health issues increased from 46% to 54% (P< 0.001) over an 8 month period. Symptom knowledge was also significantly better (*P*< 0.001), as were most of the tested prevention and treatment-related

questions (P ≤ 0.001). Their knowledge regarding access to different sources of HIV/AIDS information was also significantly better in teacher-led instruction (P ≤ 0.05. In attitude, male students' towards pressuring girls into sex did not change after the 'Family Life and HIV Education Curriculum'. However, female students' perceived ability to say no to boys' sexual advances significantly increased from 82% to 88% (P< 0.001). A significant decrease in the percentage of students who stated that they would have sex with someone they liked was observed across all students (from 22% to 17%, P< 0.001). The percentage of students who believe people their age (11–13 years) should wait to have sex until they are older significantly increased from 68% to 81% (P< 0.001). These differences remained statistically significant when controlling for gender. Teacher-led instructional showed significant improvement in their attitudes towards contraceptive use. In sexual behavior, condom use was significantly higher among teacher-led instruction (from 22.8% to 53%, P< 0.05) They found that for the intervention arm the reported number of sexual partners in the past 3 months was significantly lower than what these students reported at the pre-intervention phase (*P*< 0.05).

This study finding was supported by **Naixing Zhang(2012)** conducted a School-based HIV/AIDS health education may be an effective way to prevent the spread of AIDS among 710 adolescents. After the intervention, the answers revealed an increase in basic medical knowledge of HIV/AIDS, the students' answers to the basic medical knowledge of HIV/AIDS, such as "AIDS is an infected disease" (84.72%) and "AIDS can be prevented" (83.35%). which can be attributed to the intervention. Significant differences before and after the intervention for all questions. In Attitude toward PLHA, (68.70%) high school students said that they would like to help people living with HIV/AIDS. This rate increased 86.32% and 87.31%,

respectively, after our education and intervention (*P*<.05). This means 87.48% of the high school students would like to take care of their classmates/families if they were infected with HIV, Significant differences between the initial and final- intervention tests were observed. In sexual Behaviors 27 (1.84%) students reported having sexual relations. 20 (74.07%) students among the sexually active students reported knowing how to protect themselves during the sexual encounter. Twenty-two students (1.50%) reported drug and substance abuse, and six of these students shared injection needles with others.

3. The third objective of the study was to find the association between the post-test levels of knowledge, attitude and expressed safe sex behavior among transgender and selected demographic variables

The 'chi' square test was calculated to find out the association between post test score of knowledge, attitude, and expressed safe sex behavior and selected demographic variables. The result for knowledge revealed that that age, marital status, using condom are statistical significant at ($p<0.05$) level. Hence it is interpreted that the difference in mean score was true difference and not by chance and hypothesis H_4 was accepted, whereas education, religion, monthly income, Living arrangement, personal habit, previous knowledge, sex orientation, type of sex, are not significant at ($p<0.05$)level..

The result for attitude revealed that using condom are statistical significant at ($p<0.05$). Hence it is interpreted that the difference in mean score was true difference and not by chance and hypothesis H_5 was accepted, whereas age, education, religion, marital status, monthly income, personal habit, living arrangement, previous knowledge, sex orientation, type of sex, are where not significant at ($p<0.05$)level.

The result for expressed safe sex behaviour revealed that using condom are statistical significant at ($p<0.05$). Hence it is interpreted that the difference in mean score was true difference and not by chance and hypothesis H_6 was accepted, whereas age, education, religion, marital status, monthly income, personal habit, living arrangement, previous knowledge, sex orientation, type of sex, are not significant at ($p<0.05$)level.

This study is supported by **Alejos Ferreras. B.et.al (2015)** conducted a Population-based survey totally 1499 subjects, to analyze knowledge, attitudes and sexual practices on HIV/AIDS, 59% were women had inadequate knowledge, transmission and prevention of HIV/AIDS was observed in 67% and risk factors varied by gender (interaction p-value<0.05). Discriminatory attitudes were displayed by 85% subjects and the associated factors were: rural residence, low educational level and low income. Unsafe sex was reported by 10%; risk factors varied by residence area (interaction p-value<0.05). In urban areas, risk factors were male sex, younger age. Inadequate knowledge on HIV/AIDS and extremely high discriminatory attitudes are associated to gender, ethnic and economic inequalities, so this study supports the present study.

This study is supported by **Orathinkal Jose.et.al** (2014) it indicated that, majority had in-appropriate knowledge (93.6%), negative attitude (75.8%) and less adherent sexual practices (91.6%). In univariate analysis, lower education and higher income were significantly associated 95%, (p value 0.04) with negative attitude and un-safe practices towards HIV/AIDS respectively, whereas no significant association of socio-economic characteristics with knowledge, attitude and practices were observed in multivariate analysis. This study suggests that fishermen had very poor

knowledge, negative attitudes towards HIV and AIDS and had unsafe sexual practices which suggest that they lack the basic understanding of HIV/AIDS infection. Extensive health education campaign should be provided to the vulnerable sections of the society for the control of HIV/AIDS.

This study is supported by **Andarge Kassa .et.al (2011)** study indicated that, 'Chi'-square value was calculated and p-value < 0.05 was association between sexual health education and demographic variables are considered statistically significant. All the students had heard about AIDS before the interview. Knowledge on some aspect of the disease was quite low in the study group. 45.4% knew that acquisition of other STIs is increases the chance of HIV transmission following unsafe sex with known cases. 25% of the study group had previous sexual intercourse and exposed at least one risk behavior. About 34% of the respondents had negative attitude towards AIDS and STDs. Awareness about STDs and methods of prevention of HIV and STDs was low. More risk behavior was observed in male and those with alcohol and drugs of abuse.

CHAPTER VI

SUMMARY AND RECOMMENDATIONS

This chapter contains summary of the study, major findings, conclusion, nursing implications and recommendations for the further researches are presented. This chapter gives the brief results of the study with the future recommendations.

A. SUMMARY

The study was conducted to evaluate the effectiveness of sexual health approach on knowledge, attitude, expressed safe sex behavior regarding HIV/AIDS among transgender in Thirunangai membattu sangam, at Vellore. Review of literature was taken from primary and secondary sources that formed the basis of selection of problem, formation of tool and conceptual framework. The conceptual framework used in this study was modified Albawing von Bettanlaffy general systems model of Nursing (1986).

The research design used in the study was quantitative approach. Pre experimental, one group pretest – posttest design. The instrument used for data collection was structured questionnaire prepared by researcher regarding HIV/AIDS to assess the knowledge, attitude, safe sex behavior levels of the samples. Tool consists of demographic variables, knowledge, attitude, and expressed safe sex behavior scale of the samples which included pretest and posttest measures. Experts validated the tool.

The pilot study was conducted from **(18.07.2015 to 25.07.2015)** at Thirunangai membattu sangam at Vellore. The reliability for knowledge is - 1.00, attitude is - 0.99 and safe sex behavior is - 0.99. The study was found to be feasible and acceptable to proceed with the main study. The study participants in the pilot study were not included in the main study.

The main study was conducted on 50 transgenders who met the inclusion criteria and were selected by the simple random sampling technique. After the selection of sample, the level of knowledge, attitude, safe sex behavior was assessed and the sexual health approach was given on the day itself to the transgenders. After one week posttest was conducted on the same samples using the same structured questionnaire for knowledge, attitude, and expressed safe sex behavior. The descriptive statistics (frequency, percentage, mean, standard deviation) and inferential statistics (paired‘t’ test and ‘chi’ – square) were used to analyze the data to test the hypothesis.

The findings of the study are summarized below

The effectiveness of sexual health approach on knowledge, was assessed by comparing pre and post test scores.

- The pretest data analysis revealed that 42(84%) had moderate knowledge, 6(12%) had inadequate knowledge, 2(4%) had adequate knowledge, After sexual health approach the posttest analysis shows that 44(88%) had adequate knowledge, 6(12%) had moderate knowledge.

- The pretest mean score with the standard deviation of knowledge was 15.04±3.06, and the posttest mean score with the standard deviation of knowledge was 20.6 ± 2.72. The mean difference of pre and posttest was 5.56. The calculated paired't' value (t = 40.88) was higher than the table value (t = 3.496), which was highly significant at 'p' <0.001 level proving effectiveness of sexual health approach on HIV/AIDS, Hence the hypothesis H_1 is accepted that difference between pre and post test score of knowledge, attitude, expressed safe sex behavior were true difference thus it is interpreted the sexual health approach was effective.

- The 'chi' square test was calculated to find out the association between post test score of knowledge, and selected demographic variables. The results revealed that age, marital status, using condom is statistical significant at ($p<0.05$). whereas education, religion, monthly income, Living arrangement, personal habit, previous knowledge, sex orientation, type of sex, are not significant at ($p<0.05$)level.

The effectiveness of sexual health approach on attitude was assessed by comparing pre and post test scores.

- The pretest data analysis revealed that 40(80%) had moderately favourable attitude, 10(20%) had unfavourable attitude, After sexual health approach the posttest analysis shows that 40(80%) had favourable attitude, 10(20%) had moderate favorable attitude.

- The pretest mean score with the standard deviation of attitude was 30.6 ± 15.92 and the posttest mean score with the standard deviation of attitude was 41.96 ± 16.24. The mean difference of pre and posttest was 11.36. The calculated paired't' value (t= 34.36) was higher than the table value (t =3.496)

which was highly significant at 'p' <0.001 level proving effectiveness of sexual health approach on HIV/AIDS, Hence the hypothesis H_2 is accepted.

- The 'chi' square test was calculated to find out the association between post test score of attitude and selected demographic variables. The study revealed that using condom is statistical significant at ($p<0.05$). The results revealed that age, education, religion, marital status, monthly income, personal habit, living arrangement, previous knowledge, sex orientation, type of sex, are not significant at ($p<0.05$)level.

The effectiveness of sexual health approach on expressed safe sex behavior was assessed by comparing pre and post test scores.

- The pretest data analysis revealed that 43(86%) moderate safe sex behavior, 7(14%) had unsafe sex behavior. After sexual health approach the posttest analysis shows that 42(84%) had very safe sex behavior, 8(16%) had moderate safe sex behavior.

- The pretest mean score with the standard deviation of expressed safe sex behavior was 37.2 $\pm$ 20.32 and posttest mean score with standard deviation was 49.88 $\pm$15.91. The mean difference of pre and posttest was 12.68. The calculated paired't' value (t= 32.93) was higher than the table value (t =3.496) which was highly significant at 'p' <0.001 level proving effectiveness of sexual health approach on HIV/AIDS. Hence the hypothesis H_3 is accepted.

- The 'chi' square was calculated to find out the association between post test score of safe sex behavior and selected demographic variables. The results revealed that using condom is statistical significant at ($p<0.05$), whereas age,

education, religion, marital status, monthly income, personal habit, living arrangement, previous knowledge, sex orientation, type of sex, are not significant at ($p<0.05$)level.

B. CONCLUSION

The present study assessed the Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV among the transgenders at selected welfare society", Vellore. It is evident that sexual health approach is effective in improving knowledge, attitude and expressed safe sex behavior of HIV/AIDS. The study also suggested that specific information has to be provided to the transgenders in preventing HIV/AIDS.

C. NURSING IMPLICATIONS

The findings of the present study was to determine Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior, regarding HIV, among the transgenders. The findings of the study have implications for nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice

- Nursing education programme can be conducted by the nursing personnel both in the hospital and community area helps in preventing and controlling HIV/AIDS
- Nursing education programme with effective teaching strategies, and audio visual aids motivates people to follow healthy practices in day to day life, involving changes in life style.

- Nurses working in hospital as well as in the community can provide information and timely help the transgenders to understand about the HIV/AIDS and preventive methods.
- Nursing Health education programme with different AV aids (models, posters etc) can be conducted in the hospital settings regarding prevention of HIV/AIDS.

Nursing Education

- The Nursing curriculum should consist of knowledge related to health information using different methods of teaching.
- Nurse educator should train the nursing students should be made aware of their role in health promotion and disease prevention in the present and future.
- Nurses at post graduate level have to develop their skill in preparing health teaching material according to the patients and patient's caregiver's level of understanding and other techniques like mass media, role play, and interaction module can be used for motivating profile participation in HIV/AIDS preventive education programme.
- Nurse educator may encourage student nurses to conduct project on sexual health approach in different settings.
- This study serves as a base for the nurse educator to teach on the recent trends of treatment modalities of HIV/AIDS based on the EBP.

Nursing Administration

- The nurse administrator should take interest in providing information on health related prevention programmes beneficial to public.

- The nurse administrator should encourage transgenders to participate in prevention of HIV/AIDS programmes conducted by any other voluntary organization.

- The nursing administrator can organization workshop/conference related to HIV/AIDS.

- The nurse administrator can encourage the staff nurse to conduct programmes related to safe sex practices in outer clinic.

- The nurse administrator can take part in developing protocols related to designing the health education programmes and strategies about the effectiveness of sexual health approach.

- The nurse administrator can keep themselves updated regarding preventive techniques of HIV/AIDS

- The nurse administrator can mobilize the available resource personnel towards the health education for the staffs and nursing students.

Nursing research

- The nurses should conduct research on various aspects of HIV/AIDS, spread and its prevention, which provides more scientific data and adds more scientific body of information to the nursing profession.

- Nurse researcher can encourage clinical nurse to apply the research findings in their daily nursing care activities about prevention of HIV/AIDS.

- Dissemination of findings through conference, professional journals will make the application of research findings effective on evidence based practice about HIV/AIDS.

- The research can be expanded to all groups on safe sex behaviour to bring out the effect on health.

D. RECOMMENDATIONS

On the basis of the findings of the study "Effectiveness of sexual health approach on knowledge, attitude, and safe sex behavior regarding HIV/AIDS among Transgenders at welfare society, Vellore". Clearly indicates that educators must provide more than just accurate information about HIV/AIDS. They must be aware of the knowledge, attitudes and behaviour with regard to HIV/AIDS.

- The study can be replicated by using large samples so that, findings can be generalized.

- A study may be conducted to evaluate the effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behaviour regarding HIV/AIDS among transgenders.

- The study can be conducted in different setting like community and hospital.

- Periodical re- evaluation of knowledge of Transgenders regarding prevention of HIV/AIDS may be undertaken.

- A longitudinal study can be done on the transgenders to elicit the effectiveness of sexual health approach.

- The study can be conducted for different samples (male sex with male, female sex workers) and in different settings like community and hospital.

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APPENDIX – A

Om Namo Narayani

Service with Love

SRI NARAYANI COLLEGE OF NURSING

(A Unit of Sri Narayani Hospital & Research Centre)

Sripuram, Thirumalaikodi, Vellore - 632 055.
Vellore District, Tamilnadu. India.

Dr. N.BALAJI, Ph.D., FIMSA, FACSc.
Director

27.12.2014

To

Ms. Jothika, B.Sc.,
Thirunangai Mempattu Sangam,
Vellore District,
Opp – Vishnu Theatre,
Viruthampattu, Vellore.

Madam,

Sub : Requisition for permission to conduct Research Project.

This is for your kind information that Mrs. Chamundeswari, Studying M.Sc (N) I year has to conduct a Research project as a part of her course. Her study topic is **"Effectiveness of sexual Health Approach towards HIV/AIDS prevention among the transgender Population at Vellore"**. She needs transgender population for her Research study. So, Please kindly give her permission and do needed help for her study.

Thanking You

S. P. Jothika
2/01/2015
Friday

Your Sincerely,

Lalitha. B.

ADMINISTRATIVE OFFICER
SRI NARAYANI COLLEGE OF NURSING
THIRUMALAIKODI,
VELLORE - 632 055.

Phone : 0416 - 2270225, 2270224, Fax : 0416 - 2270224
E-mail : aosnc@snhrc.org

APPENDIX – B

CERTIFICATE OF VALIDATION

This is to certify that the knowledge, attitude, safe sex behavior measures (Non standardized Tool) and the Demographic variables for the research study **"Effectiveness of sexual health approach on knowledge, attitude, and Expressed safe sex behavior regarding HIV/AIDS among Transgenders at welfare society, Vellore."** prepared by **Mrs. Chamundeswari. P,** has been validated.

Name :

Designation :

Date :

Institution :

Signature :

APPENDIX –C

LIST OF EXPERTS FOR TOOL VALIDATION

1. **Dr. Menaka. M.Sc (N),**
   Principal,
   Padmasree College of Nursing,
   Walajabad,
   Kancheepuram.

2. **Mrs. Ida Anitha Nirmal, M.Sc(N),**
   Professor,
   Dept Of Medical Surgical Nursing,
   College of Nursing,
   CMC, Vellore.

3. **Mrs. Sofia Vijayanandan, M.Sc (N),**
   Associate Professor,
   Dept of Medical Surgical Nursing,
   College of Nursing,
   CMC, Vellore.

4. **Mrs. Devanithi, M.Sc(N).,**
   Associate Professor,
   Dept of Medical Surgical Nursing,
   Indira College of Nursing
   Thiruvallur,
   Tamil Nadu.

5. **Mr. Muthurathinum,M.Sc, (Biostat)**
   Biostatistian,
   Sri Narayani College Of Nursing,
   Vellore,
   Tamil Nadu.

APPENDIX –D

CERTIFICATE OF ENGLISH EDITING

To Whomsoever It May Concern

This is to certify that the content prepared by Mrs. Chamundeswari.P on **"A STUDY TO ASSESS THE EFFECTIVENESS OF SEXUAL HEALTH APPROACH ON KNOWLEDGE, ATTITUDE, AND EXPRESSED SAFE SEX BEHAVIOR REGARDING HIV/AIDS AMONG TRANSGENDERS AT WELFARE SOCIETY, VELLORE"** has been edited by me in English language.

Signature 25.1.16.

M.A.,M.Ed.,M.Phil.

தலைமை ஆசிரியை
எ. வே. ரா. நாகம்மை
அரசு மகளிர் மேனிலைப் பள்ளி
வேலூர் - 632 001, வே.மா.

APPENDIX –E

CERTIFICATE OF TAMIL EDITING

To whomsoever It May Concern

This is to certify that the content prepared by **Mrs.Chamundeswari.P** on **"A STUDY TO ASSESS THE EFFECTIVENESS OF SEXUAL HEALTH APPROACH ON KNOWLEDGE, ATTITUDE, AND EXPRESSED SAFE SEX BEHAVIOR REGARDING HIV/AIDS AMONG TRANSGENDERS AT WELFARE SOCIETY, VELLORE"** she has prepared the tool and content. It has been been edited by me in tamil language.

K Sudhamathi

Signature

Mrs. K. SUDHAMATHI. M.A., M.Phil.(Eng)
B.T Teacher
E. V. R. N. G. G. Hr. Sec. School,
VELLORE - 632 001.
B.T - Tamil.

APPENDIX –F

Letter requesting participation in the study

Dear participant,

I, **Mrs. P. Chamundewari,** II year M.Sc Nursing student, Sri Narayani College of Nursing, am conducting a Research Dissertation on **"Effectiveness of sexual health approach on knowledge, attitude, and expressed safe sex behavior regarding HIV/AIDS among transgenders at welfare society, Vellore",** as a partial fulfillment of my Master's Degree. In this regard I would like to teach and demonstrate of condom usage to improve your knowledge, attitude, and expressed safe sex behavior. I assure you that the information obtained from you will be strictly kept confidential and will be used for the study purpose only. I need your whole-hearted cooperation in this study to gather information and I will be much grateful to you for the same.

Thanking you in anticipation,

Yours sincerely,

Mrs.P.Chamundeswari.

CONSENT

I have been informed for the purpose of the study and I agree to participate in the same.

Date:

Place:

Signature of participant

ஆய்வில் பங்கேற்பதற்கான கோரிக்கை கடிதம்

அன்பான பங்கேற்பாளருக்கு:

ஸ்ரீ நாராயணி செவிலியர் கல்லூரியில் இரண்டாம் ஆண்டு முதுகலை செவிலியர் பட்டப்படிப்பு படிக்கும் திருமதி பொ. சாமூண்டீஸ்வரி ஆகிய நான் மூன்றாம் இனத்தவருக்கு **எச்.ஐ.வி / எயிட்ஸ்** க்குகான பாலியல் சுகாதார அணுகுமுறை பற்றி படிப்பிக்க உள்ளேன்.

இந்த அணுகுமுறையில் **எச்.ஐ.வி** தொற்றை தடுக்கலாம்.

உங்களிடமிருந்து பெறப்படும் தகவல்கள் படிப்பிற்காக மட்டும் உபயோகிக்கபடும் மற்றும் நம்பகமாக இருக்கும் என உறுதி அளிக்கிறேன்.

உங்கள் மனப்பூர்வமான ஒத்துழைப்பை வேண்டுறேன்.

நன்றி

உங்கள் உண்மையுள்ள,

பெ. சாமூண்டீஸ்வரி

அனுமதி,

எனக்கு இந்த ஆய்வின் நோக்கம் தெரிவிக்கப்பட்டது. நான் இதில் பங்கேற்க சம்மதிக்கிறேன்.

தேதி :

இடம் :

பங்கேற்பாளரின் கையொப்பம்

APPENDIX -G

DEMOGRAPHIC VARIABLES

DATE: **SAMPLE NO:**

INSTRUCTION:

Please fill your response to all the items given below by writing and putting a tick (√) mark in the space provided in the bracket against the following items. Kindly answer all the questions. The information given by you will be kept confidential.

SECTION: A

1. **AGE (in years)**

1.1) 18 – 20 [ ]

1.2) 21 – 30 [ ]

1.3) 31 – 40 [ ]

1.4) >40 [ ]

2. Education

2.1) No formal education [ ]

2.2) Primary education [ ]

2.3) Secondary education [ ]

2.4) Higher secondary [ ]

2.5) Diploma [ ]

2.6) Graduate [ ]

3. Religion

3.1) Hindu [ ]

3.2) Muslim [ ]

3.3) Christian [ ]

3.4) Others [ ]

4. Marital status

4.1) Married [ ]

4.2) Unmarried [ ]

4.3) Widow [ ]

4.4) Separated [ ]

4.5) Any Others [ ]

5. Monthly income (Rs)

5.1) 3000 – 4000 [ ]

5.2) 4001 – 5000 [ ]

5.3) 5001 – 6000 [ ]

5.4) 6001 – 7000 [ ]

6. Any personal habits

6.1) Smoking [ ]

6.2) Alcohol [ ]

6.3) Drug abuse [ ]

6.4) Pan chewing [ ]

7. Living arrangement

7.1) With family [ ]

7.2) With neighbor [ ]

7.3) With friends [ ]

7.4) Any others [ ]

8. Previous knowledge on HIV/AIDS education

8.1) Mass media [ ]

8.2) Health professionals [ ]

8.3 Through friends and relatives [ ]

8.4 Others [ ]

9.Sex orientation

9.1) Heterosexual [ ]

9.2) Homosexual [ ]

9.3) Bisexual [ ]

9.4) Any others [ ]

10. Type of sex

10.1) Vaginal/anal [ ]

10.2) Anal/oral [ ]

10.3) Oral/vagina [ ]

10.4) Masturbation [ ]

11. Condom usage

11.1). Yes [ ]

11.2). No [ ]

SECTION –B

PART: I Knowledge questionnaire on HIV/AIDS among Transgenders.

INSTRUCTION: Please read each statement carefully and put tick (√) either in True (T), False (F), which you feel is correct against the appropriate space provided on the right side.

S.NO	STATEMENT	True	false
1	HIV is a virus.		
2	HIV and AIDS are the same thing.		
3	Persons having multiple sex partners can get HIV infection.		
4	Unprotected sexual intercourse will not cause HIV infection.		
5	HIV can be transmitted by sharing needle or syringe.		
6	Person can get HIV from sharing foods, plates, clothes and sharing toilet.		
7	HIV can be spread by mosquitoes.		
8	HIV can be transmitted by blood transfusion.		
9	It is possible to get HIV when a person gets a tattoo.		
10	Douching after sex will keep a person from getting HIV.		
11	HIV can be transmitted by shaking hands, coughing and sneezing.		
12	Person cannot get HIV by having oral sex, mouth to penis, with a man who has HIV.		
13	Uncircumcised man has more chance to get HIV infection.		
14	Female condom is available, that can help decrease a women's chance of getting HIV.		
15	Person infected with HIV quickly (1-2 month) show serious signs of being infected.		
16	Person with HIV may look and feel healthy.		
17	Tuberculosis always accompany with HIV/AIDS.		
18	Voluntary and counsel and testing Centre provides a accurate information about HIV/AIDS.		
19	ELISA test are screening test for HIV infection.		
20	Western blot test is a confirmative test for HIV infection.		
21	ART is the treatment for HIV/AIDS.		
22	ART can prolong life and improve the quality of life.		
23	There is cure/vaccine for AIDS.		
24	HIV can be prevented by properly using condom during sexual intercourse.		
25	HIV transmission can be avoided by remaining faithful to a single partner.		

PART II: Attitude questionnaire on HIV/ AIDS among Transgenders.

Instruction to the participant: Please indicate how much agree or disagree with each of the following statement by placing a tick mark (√) in the appropriate column.

Keys: SA – Strongly agree, **A** – Agree, **UD** – Undecided, **DA** – Disagree, **SD** – Strongly disagree

S.NO	ITEMS	SA	A	UD	DA	SD
1	I think HIV/AIDS affected clients can donate their blood and body organs to others.					
2	I believe AIDS infections can be prevented by using condom.					
3	I will insist to use condoms if both the partners are HIV positive.					
4	I think multi sex is good habit.					
5	I believe that HIV/AIDS is a preventable disease.					
6	I dislike the idea of limiting sex to just one partner to avoid HIV infection.					
7	I would avoid sex if there is a slight chance that my partner might have HIV.					
8	I can influence my friends to practice safe sex behavior.					
9	I believe AIDS patient can have unprotected sex.					
10	It would be embarrassing to get the HIV antibody test.					

PART III **Expressedsafe sex behavior questionnaire on HIV/ AIDS among Transgenders.**

Directions: Given below is a list of sexual practices. Please read each statement and respond by indicating your degree of use of these practices**.**

1 = Never **2 = Sometimes** **3 = Most of the Time** **4 = Always**

S.NO	STATEMENT	NEVER	SOMETIMES	MOST OF THE TIMES	ALWAYS
1	I insist on condom use when I have sexual intercourse.				
2	I use cocaine or other drugs prior to or during sexual intercourse.				
3	I avoid direct contact with my sexual partner's semen or vaginal secretions				
4	I ask my potential sexual partners about a history of bisexual/homosexual practices and IV drug uses				
5	I engage in sexual intercourse on a first date.				
6	I abstain from sexual intercourse when I do not know my partner's sexual history				
7	I avoid sexual intercourse when I have sores or irritation in my genital area.				
8	I engage in oral sex without using protective barriers such as a condom or rubber dam				
9	I engage in oral sex without using protective barriers such as a condom or rubber dam				
10	If I know an encounter may lead to sexual intercourse, I carry condom or I have a mental plan to practice safer sex				
11	If my partner insists on sexual intercourse without a condom, I refuse to have sexual intercourse.				
12	I avoid direct contact with my sexual partner's blood				
13	It is difficult for me to discuss sexual issues with my sexual partners				
14	I initiate the topic of safer sex with my potential sexual partner.				
15	I have sexual intercourse with someone who I know is a bisexual or gay person.				

ANSWERS KEYS FOR KNOWLEDGE QUESTIONNAIRE

S. No	Answers
1	TRUE
2	FALSE
3	TRUE
4	FALSE
5	TRUE
6	FALSE
7	FALSE
8	TRUE
9	TRUE
10	FALSE
11	FALSE
12	FALSE
13	TRUE
14	TRUE
15	FALSE
16	TRUE
17	TRUE
18	TRUE
19	TRUE
20	TRUE
21	TRUE
22	TRUE
23	FALSE
24	TRUE
25	TRUE

APPENDIX - H

பகுதி – அ

தனிநபர் தகவல் சேகரிப்புக் கருவி

பங்கேற்பாளரின் எண்:-

1. வயது (வருடங்களில்)

    அ. 18 முதல் - 20 க்கு கீழ்
    ஆ. 21 முதல் 30 வரை
    இ. 31 முதல் 40 வரை
    ஈ. 40 க்கு மேல்

2. கல்வி தகுதி :-

    அ. படிப்பறிவில்லாதவர்
    ஆ. ஆரம்பக் கல்வி
    இ. நடுநிலைக் கல்வி
    ஈ. மேல்நிலைக்கல்வி
    உ. பட்டயப் படிப்பு
    ஊ. பட்டதாரி மற்றும் அதற்கும் மேல்

3. மதம் :-

    அ. இந்து
    ஆ. முஸ்லீம்
    இ. கிறிஸ்துவர்
    ஈ. மற்றவை

4. திருமண விவரம் :-

    அ. திருமணமானவர்
    ஆ. திருமணமாகாதவர்
    இ. கணவனை / மனைவியை இழந்தவர்
    ஈ. பிரிந்து வாழ்பவர்
    உ. மற்றவை

5. மாத வருமானம் (ருபாய்) :-

    அ. 3000 முதல் 4000 வரை
    ஆ. 4001 முதல் 5000 வரை
    இ. 5001 முதல் 6000 வரை
    ஈ. 5000 முதல் 7000 வரை

6. தனிப்பட்ட பழக்கங்கள் :-

அ. புகைப் பிடித்தல்
ஆ. மது
இ. போதை மருந்து
ஈ. வெற்றிலைப் பாக்கு

7. தங்கும் வசதி

அ. சொந்த குடும்பத்துடன்
ஆ. அண்டைவீட்டார்
இ. நண்பர்களுடன்
ஈ. தனியாக

8. எய்ட்ஸ் பற்றிய கல்வி பெற்றுள்ளவரா ? ஆம் / இல்லை. ஆம் என்றால் ?

அ. தொலைத் தொடர்பு சாதனங்கள்
ஆ. நல பணியாளர்கள்
இ. நண்பர்கள் மற்றும் உறுப்பினர்கள் வாயிலாக
ஈ. மற்றவை

9. பாலியல் நோக்குநிலை :-

அ. எதிர் பால்
ஆ. ஓரின சேர்க்கை
இ. இருபால் உறவு
ஈ. ஒன்றுமேயில்லை

10. உடலுறவு முறை

அ. யோனி / ஆசனவாய்
ஆ. ஆசனவாய் / வாய்வழி
இ. வாய்வழி / சுயஇன்பம
ஈ. சுயஇன்பம்

11. ஆணுறை / பெண்ணுறை பயன்படுத்துவீர்களா ?

அ. ஆம்
ஆ. இல்லை

பிரிவு – ஆ

பகுதி - I

எச்.ஐ.வி மற்றும் எயிட்ஸ் பற்றிய அறிவை சோதிக்கும் நேர்காணல் பட்டியல்

கீழே கொடுக்கப்பட்டுள்ள வாக்கியங்கள், சரியா, தவறா என்று குறிக்கவும் (உங்கள் விடைக்கு நேராக (√) குறியிடவும்.

எண்	கேள்வித்தாளை	ஆம்	இல்லை
1	எச்.ஐ.வி ஒரு வைரஸ்		
2	எச்.ஐ.வி மற்றும் எய்ட்ஸ் இரண்டும் ஒன்றே		
3	ஒருவர் பலருடன் உடலுறவு வைத்துக் கொள்வதால் எச்.ஐ.வி பரவ வாய்ப்பு உள்ளது.		
4	பாதுகாப்பற்ற உடலுறவினால் எச்.ஐ.வி பரவாது.		
5	ஒருவர் பயன்படுத்திய ஊசியை மற்றவர் பயன்படுத்தும் போது எச்.ஐ.வி வைரஸ் பரவும் வாய்ப்பு உள்ளது.		
6	எச்.ஐ.வி பாதிக்கப்பட்ட நபரின் உணவு, உடை, கழிவறை பகிர்ந்து கொள்வதன் மூலம் எச்.ஐ.வி பரவும்.		
7	கொசுக்களின் மூலம் எச்.ஐ.வி பரவும்		
8	ஒருவர் இரத்ததானம் செய்வதன் மூலம் எச்.ஐ.வி தொற்றைப் பெறுவார்.		
9	உடம்பில் பச்சைக்குத்திக் கொள்வதன் மூலம் எச்.ஐ.வி பரவும்.		
10	உடலுவிற்கு பின் பிறப்புறுப்பினை தண்ணீரினால் சுத்தப்படுத்துவதால் எச்.ஐ.வி னால் வரும் நோய் வராது.		
11	எச்.ஐ.வி / எய்ட்ஸ் நோயால் பாதிக்கபட்டவரைத் கைக்குலுக்குவதினால், மற்றும் அவரின் இரும்மல், தும்மல் மூலம் எச்.ஐ.வி தொற்று ஏற்படும்.		
12	எச்.ஐ.வி உள்ள நபரோடு வாய்வழி புணர்ச்சி வைத்து கொள்ளும் பொழுது எச்.ஐ.வி பரவாது.		
13	ஆண்களின் பிறப்புறுப்பின் நுனித்தோல் அகற்றாவிட்டால் எச்.ஐ.வி பரவ அதிக வாய்ப்பு உள்ளது.		
14	ஆணுறை / பெண்ணுறை உபயோகிப்பதினால் எச்.ஐ.வி பரவுவதை தடுக்கலாம்.		

15	எச்.ஐ.வி வைரஸ் பாதிக்கபட்டவருக்கு மிக குறுகிய காலத்தில் (1 – 2 மாதத்தில்) அதன் அறிகுறிகள் தென்படும்.		
16	எச்.ஐ.வி உள்ளவர்களை காண்பதற்கு உடல் மற்றும் மனரீதியாக நலமாக இருப்பதாக தோன்றும்.		
17	எச்.ஐ.வி பாதிக்கப்பட்டவருக்கு காசநோய் இருக்கும்.		
18	எச்.ஐ.வி வைரஸ் கலந்தாய்வுமையம் மற்றும் பரிசோதனை மையம் (VCTC) என்பது எச்.ஐ.வி பற்றி ஒரு துல்லியமான தகவல்களை பரிசீலீக்க உதவுகிறது.		
19	ELISA (எலிசா) சோதனை மூலம் எச்.ஐ.வி இருப்பதை கண்டு பிடிக்கலாம்.		
20	Western Blot test செய்வதன் மூலம் எச்.ஐ.வி இருப்பதை உறுதி செய்யலாம்.		
21	எச்.ஐ.வி க்கு ART என்ற சிகிச்சை முறை உள்ளது.		
22	ART யினால் வாழ்க்கை நீடிக்கவும், வாழக்கை தரத்தை மேம்படுத்தவும் முடியும்.		
23	எச்.ஐ.வி / எய்டஸ் நோயை குணப்படுத்த / தடுக்க தடுப்பூசி உள்ளது.		
24	உடலுறவு கொள்ளும் போது, ஆணுறை / பெண்ணுறையை சரியாக பயன்படுத்தினால் எச்.ஐ.வி / எய்ட்ஸ் பரவாது.		
25	ஒருவனுக்கு ஒருத்தி என்ற கொள்கை முறையில் வாழ்வதின் மூலம் எச்.ஐ.வி பரவுவதை தடுக்கலாம்.		

பகுதி - II

எய்ட்ஸ் பற்றிய மனப்பான்மையை சோதித்தறிதல்

- உங்களுக்கு விடையளிப்பதற்கான வாய்ப்பு ஐந்து வழிகளில் கீழே கொடுக்கப்பட்டுள்ளது.

தேர்ந்தெடுக்கும் உரிமை :-

திடமாக ஏற்றுக்கொள்ளபடுகிறது (SA)
ஏற்றுக் கொள்ளப்படுகிறது. **(A)**
முடிவு செய்ய இயலாது **(UD)**
ஏற்றுக்கொள்ள முடியாது **(DA)**
திடமாக ஏற்றுக் கொள்ள முடியாது **(SDA)**

வ. எண்	கேள்வித்தாளை	திடமாக ஏற்றுக் கொள்ள படுகிறது	ஏற்றுக் கொள்ளப் படுகிறது.	முடிவு செய்ய இயலாது	ஏற்றுக் கொள் முடியாது	துிடமா ஏற்றுக் கொள் முடியாது
1	எச்.ஐ.வி / வைரஸ் நோய் தாக்கப்பட்டவர் தம்முடைய இரத்தத்தையும் உடல் உறுப்புகளையும் தானம் செய்யலாம் என நினைக்கிறேன்.					
2	ஆணுறை (அ) பெண்ணுறை பயன்படுத்துவதன் மூலம் எய்ட்ஸ் நோயை தடுக்க முடியும் என நினைக்கிறேன்					
3	உடலுறவு கொள்ளும் இருவருக்கும் எய்ட்ஸ் நோய் இருந்தாலும் அவர்களை ஆணுறை / பெண்ணுறை பயன்படுத்த வலியுறுத்துவேன்					
4	பலருடன் உடலுறவில் ஈடுபடுவது நல்ல பழக்கம்.					
5	எச்.ஐ.வி / எய்ட்ஸ் தடுக்ககூடிய நோய்					
6	எச்.ஐ.வி நோய் ஏற்படாமல் தவிர்ப்பதற்காக ஒருவருடன் மட்டும் உடலுறவு வைத்துக்கொள்ளும் யோசனையில் எனக்கு விருப்பமில்லை.					
7	என்னுடைய துணைவருக்கு எச்.ஐ.வி நோய் பாதிப்பிற்கான வாய்ப்பு இருப்பதால் கருதினால்					

	நான் நிச்சயமாக உடலுறவை தவிர்ப்பேன்.					
8	என்னுடைய நண்பர்கள் / தோழிகளை பாதுகாப்பான உடலுறவு முறையை பின்பற்ற வலியுறுத்துவேன்.					
9	எய்ட்ஸ் நோயாளிகள் பாதுகாப்பற்ற உடலுறவை வைத்துக் கொள்ளலாம் என நான் நம்புகிறேன்.					
10	நான் எச்.ஐ.வி சோதனை (அல்லது) எச்.ஐ.வி ஆண்டிபாடி சோதனைபெற சங்கடமாக இருக்கும் என நினைக்கிறேன்.					

பகுதி – III

வெளிப்படுத்தும் பாதுகாப்பான உடலுறவுலின் நடத்தை

வ. எண்	கேள்வித்தாளை	எப்பவும் இல்லை	எப்பொழுதுதாவது	சந்தர்ப நேரங்களில்	எப்பொழுதுமே
1	நான் உடலுறவில் ஈடுபடும் போது ஆணுறை அல்லது பெண்ணுறையை பயன்படுத்துமாறு வலுயுறுத்துவேன்.				
2	நான் உடலுறவின் போதோ அல்லது அதற்கு முன்போ கோகோயின் அல்லது வேறு போதை மருந்துகளை பயன்படுத்துவேன்.				
3	நான் உடலுறவின் போது என்னுடைய துணையில் விந்து (அல்லது) பிறப்புறுப்பின் சுரப்பின் நேரடி தொடர்பை தவிர்ப்பேன்.				
4	என்னுடைய சாத்தியமான துணையிடம் ஒரின சேர்க்கை (அல்லது) ஈரின சேர்க்கை பற்றிய விவரங்களை கேட்டறிவேன்.				
5	நான் ஒருவரின் முதல் சந்திப்பிலே உடலுறவில் ஈடுபடுவேன்.				
6	என்னுடைய துணையின் பாலியியல் விவரங்களை தெரியவில்லை எனில், நான் உடலுறவில் ஈடுபடமாட்டேன்.				
7	என்னுடைய பிறப்புறுப்பில் எரிச்சலோ, அல்லது புண்கள் இருக்கும்போது நான் உடலுறவை தவிர்ப்பேன்.				
8	நான் பாதுகாப்பான செக்ஸ் முறை எதும் பயன்படுத்தாமல் வாய்வழி செக்ஸில் ஈடுபடுவேன்.				
9	நான் ஆணுறை (அல்லது) பெண்ணுறை இல்லாமல் ஆசனவாய் புணர்ச்சியில் ஈடுபடுவேன்.				
10	திடீரென உடலுறவு ஏற்படும் வாய்ப்பு இருப்பதாக தெரிய வந்தால், நான் காண்டம் எடுத்து செல்வேன் அல்லது மனரீதியா பாதுகாப்பான உடலுறவை பின்பற்றுவேன்.				
11	என்னுடைய பாலியல் துணை ஆணுறை (அ) பெண்ணுறை இல்லாமல் உடலுறவிற்கு அழைத்தால், நான் அதை மறுப்பேன்.				

12	என் பாலியல் துணையின் இரத்தத்தை எதேனும் வழியில் நேரடியாக தொடர்பு கொள்வதை தவிர்ப்பேன்.				
13	பாலியல் பிரச்சனைகளை பற்றி என்னுடைய துணையிடம் கலந்துரையாட எனக்கு கஷ்டமாக உள்ளது.				
14	என்னுடைய சாத்தியமான பாலியல் துணையிடம் பாதுகாப்பான பாலியல் பற்றி பேச தொடங்குவேன்.				
15	ஆண் ஓரின சேர்க்கை உள்ளவரிடம் நான் உடலுறவில் ஈடுபடுவேன்.				

அறிவு சோதிக்கும் கேள்விதாளின் பதில்கள்

வரிசை எண்	பதில்கள்
1	சரி
2	தவறு
3	சரி
4	தவறு
5	சரி
6	தவறு
7	தவறு
8	சரி
9	சரி
10	தவறு
11	தவறு
12	தவறு
13	சரி
14	சரி
15	தவறு
16	சரி
17	சரி
18	சரி
19	சரி
20	சரி
21	சரி
22	சரி
23	தவறு
24	சரி
25	சரி

APPENDIX – I

SEXUAL HEALTH APPROACH
ON
HIV/AIDS AMONG TRANSGENDERS

BIOGRAPHIC DATA

NAME OF THE INVESTIGATOR	**:**	MRS. CHAMUNDESWARI.P
COURSE	**:**	M.Sc.,(N), II YEAR
SPECIALITY	**:**	MEDICAL – SURGICAL NURSING
TOPIC	**:**	SEXUAL HEALTH APPROACH ON HIV/AIDS
GROUP	**:**	TRANSGENDERS
GROUP SIZE	**:**	50
TIME/DURATION	**:**	1 HOUR
PLACE	**:**	THIRUNANGAI MEMPATTU SANGAM, VELLORE.
METHOD OF TEACHING	**:**	LECTURE CUM DISCUSSION, DEMONSTRATION.
A.V.AIDS	**:**	PPT, DEMONSTRATION, PAMPHLETS, POSTERS.

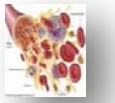
General objectives:

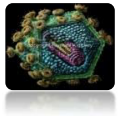
At the end of the sexual health approach, transgenders will be able to fain adequate knowledge, favourableattitude and satisfactory expressed safe sex behaviour.

Specific objectives:

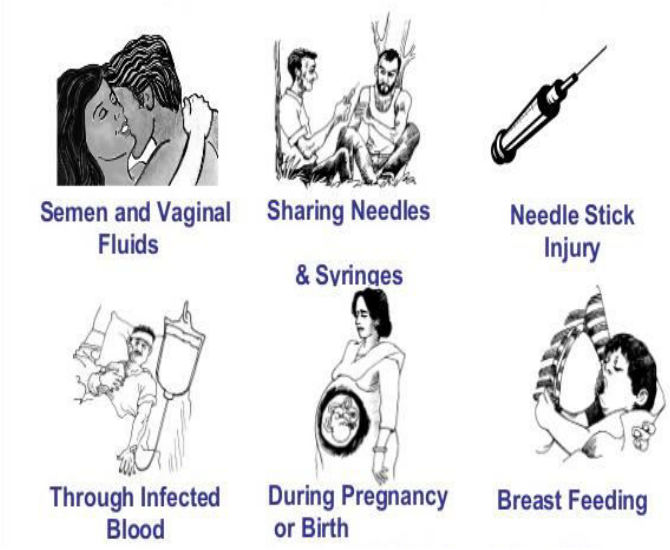
At the end of the sexual health approach, transgenders will be able to

- define HIV, AIDS and immune system.
- discuss the mechanism of HIV TO AIDS.
- describe the mode of transmission.
- list down the risk factors.
- enumerate the clinical manifestation.
- enlist the diagnostic tests.
- describe the prevention of HIV/AIDS.
- enlist the ART therapy

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS LEARNER ACTIVITY	A.V AIDS
½ Min ½ Min	define immune system	**INTRODUCTION** The acquired immune deficiency syndrome is a fatal illness caused by a retrovirus known as the human immune deficiency virus which breaks down the bodys immune system, leaving the victim vulnerable to a life threatening opportunistic infections, neurological disorders, or unusual malignancies. Among the special features of Human immune deficiency virus infection are that once infected, it is probable that a person will be infected for life strictly speaking, the term acquired immune deficiency syndrome refers only to the last stage of the Human immune deficiency virus infection. **DEFINITION:** <u>IMMUNE SYSTEM</u> • Immune system protects and defends the body from infections. • White blood cells (WBC) are the most important part of the immune system. • WBCs fight and destroy bacteria, fungi, and viruses that enter the	Teaching / Learning	PPt 

½ Min	define HIV	body. • CD4 cells it is also known as helper cell or CD4 receptor on its surface and fights infections. It signals other cells in the body's immune system to perform their special functions and coordinates immune response. • The number of CD4 cells in a sample of blood is an indicator of the health of the immune system. HIV infects and kills CD4 cells, leading to a weakened immune system. **HIV** H – HUMAN I - IMMUNODEFICIENCY V – VIRUS The human immunodeficiency virus (HIV) is a retrovirus, which attack the T- cells of the immune system, destroying or impairing their function. As the infection progresses, the immune system becomes weaker, leading to "immune deficiency" and the persons becomes more susceptible to infections.HIV cannot be destroyed by the body. An infected person carries HIV for life.	Teaching / Learning	PPT / Pamphlet 

½ Min	define AIDS	**AIDS**: A - Acquired(not inherited – contracted by direct contact with body fluids that have high concentration of HIV, either from high risk behavior or exposure) I - Immune(weakens the immune system) D - Deficiency(of certain white blood cells – T4 lymphocytes in the immune system) S – Syndrome(a group of symptoms or illnesses as a result of HIV infection)	Teaching / Learning	PPT / Pamphlet
3 Mins	discuss the mechanism of HIV TO AIDS	**HOW HIV WORKS IN THE BODY?** HIV uses the CD4 cell like a factory to reproduce more of itself. The point below shows the steps in HIV cell replication. • Attachment to host CD4 cell • Reverse transcriptase makes DNA from the virus RNA • Integration into host cells nucleus • Reproduction of viral components • Assembly of new HIV viruses • Release	Teaching / Learning	PPT

5 Mins	describe the mode of transmission	**HOW HIV CAUSES AIDS** • Viral replication leads to decrease in CD4 cells • As viral replication continues, there is further impairment of the immune system reducing the body's capacity to fight infection • The individual becomes more susceptible to opportunistic infections AIDS is characterized by the presence of opportunistic infections **MODE OF HIV TRANSMISSION**  	Teaching / Learning	PPT / Pamphlet / Poster

		A.**UNPROTECTED SEX WITH HIV PERSON:-** Person may become infected, if they have vaginal, anal or oral sex with an infected partner whose blood semen or vaginal secretion enters your blood. The virus can enter your body through mouth sore, small tear that sometimes develop in the rectum or vagina during sexual activity. B**. SHARING NEEDLE:** ✓ HIV can be transmitted through needles and syringes contaminated with infected blood. ✓ Reusing and sharing needles for injecting drugs(steroids, hormones) ✓ Tattoos or body piercings, shaving material. C. **FROM BLOOD TRANSFUSION:-** Virus may be transmitted through blood transfusion. D.**DURING PREGNANCY OR DELIVERY OR THROUGH BREAST FEEDING**:- ✓ infection can be transmitted from an infected mother to her fetus during pregnancy, during delivery, or by breast feeding. ✓ But receiving treatment for HIV infection during pregnancy,		

3 Mins	list down the risk factors	mother significantly lowers the risk to their babies. E.**OCCUPATIONAL EXPOSURE**:- ✓ Health care worker at potential risk of HIV infection are percutaneous injuries (e.g. needle stick or cut with a sharp object) or contact of mucous membrane. F. **TRANSMISSION BY OTHER BODY FLUIDS**:- • contaminated blood • Semen, Breast milk • Vaginal secretion • Cerebrospinal fluid(fluid around the brain and spinal cord) • Synovial, pleural, peritoneal, pericardial fluids. • Amniotic fluids.(fluid around a developing fetus) **RISK FACTORS**: A. Sexual activities:- ✓ Engaging in a sexual activities while under the influence of drugs or alcohol. ✓ Having multiple sex partner. ✓ Presence of sores in the mouth and genital area I. HAVING UNPROTECTED SEX:- ✓ Having sex without using a latex condom or polyurethane condom every time. ✓ Anal sex is more risky than vaginal sex.		

3 Mins	list down the risk factors	II.HAVING SEXUAL TRANSMITTED:- ✓ Sexual transmitted disease or infection produce open sores on your genitals. ✓ These sores act as door ways for HIV virus to enter inside the body. B. USING INTRAVENOUS DRUGS:- ✓ People who use intravenous drugs (drug abuse) often share needle and syringes this exposure them to droplets of others people's blood. C. UNCIRCUMCISED MAN:- ✓ Lack of circumcision increase the risk of heterosexual transmission of HIV. **HIV/AIDS NOT TRASMITTED (UNLESS CONTAMINATED WITH VISIBLE BLOOD)** ❖ Tears ❖ Sweats ❖ Urine ❖ Feces ❖ Saliva ❖ Coughing & sneezing	Teaching / Learning	PPT

		❖ Kissing, Hugging ❖ Swimming in the same pool ❖ Sharing cooking utensils, same toilet clothing bed linen ❖ Insect bites, mosquito bites ❖ Having daily contact with positive living HIV **CLINICAL STAGING OF HIV/AIDS (WHO)** CLINICAL STAGE:1 ▪ Asymptomatic ▪ Persistent generalized lymphadenopathy CLINICAL STAGE:2 ▪ Unexplained moderate weight loss. ▪ Recurrent respiratory tract infections ▪ Herpes zoster ▪ Angular Cheilitis Recurrent oral ulceration ▪ Papular pruritic eruption ▪ Seborrhoeic dermatitis ▪ Fungal nail infection CLINICAL STAGE:3 ▪ Unexplained severe weight loss ▪ Unexplained chronic diarrhea for longer than one month ▪ Unexplained persistent fever	Teaching / Learning	PPT / Pamphlet

2 Mins	enumerate the clinical manifestation	▪ Oral hairy candidiasis ▪ Pulmonary tuberculosis CLINICAL STAGE:4 ▪ HIV wasting syndrome ▪ Pneumocystis pneumonia ▪ Recurrent severe bacterial pneumonia ▪ Chronic Herpes simplex infection ▪ Esophageal candidiasis ▪ Extra pulmonary tuberculosis ▪ Kaposi sarcoma ▪ Cytomegalovirus infection ▪ HIV encephalopathy ▪ Meningitis ▪ Chronic isosporiasis ▪ Disseminated mycosis ▪ Lymphoma ▪ Invasive cervical carcinoma ▪ Symptomatic HIV associated Nephropathy and Cardiopathy **CLINICAL STAGING SYSTEM FOR HIV DISEASE PROGRESSION**:- **Primary HIV infection or acute retroviral syndrome (ARS)** When HIV first enters the body, the immune system recognizes the "antigen" and causes flu-like symptoms. During this time HIV – Viral load is high and		

		therefore infected person is highly infectious and can easily transmit virus to others during this time occur 2-4 weeks after exposure and lasts 1-2 weeks. **Window period:-** Once body is infected it usually takes 2 to 12 weeks for it to develop HIV antibodies. During this "window period" the person although infected, tests negative for HIV antibodies. **Asymptomatic chronic infection:-** Early immune depletion CD4>500. Level of virus is low. HIV replication takes place mostly within lymph nodes. Generally lasts 5 years or more may be less for patients with malnutrition or co- infection generalized persistent lymphadenopathy **Symptomatic HIV infection:-** Intermediate immune depletion CD4 between 200 – 500 infections starts and persist as CD4 count decrease. **Advanced HIV infection AIDS:-** Advanced immune depletion CD4 <200 case definition of AIDS is having aCD4 count of <200 **DIAGNOSTIC TESTS:-**		

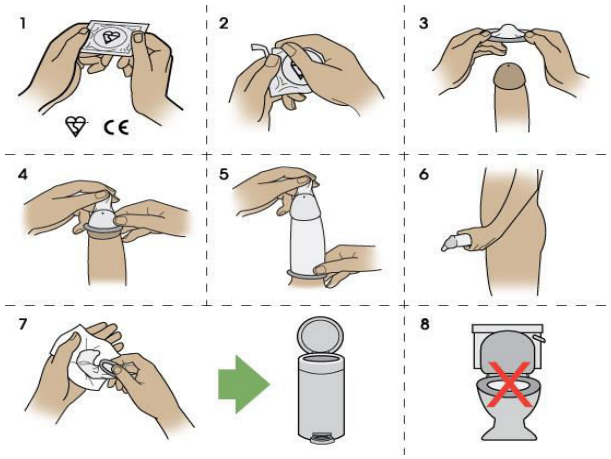
2 Mins		There are the two types of diagnostic test. 1. HIV Antibody test 2. HIV Antigen test **1. HIV Antibody test:-** Substance that is produced by the immune system in response to system antigen thereby helping the body fight infection and foreign substances. Antibody test are: o HIV Rapid test o ELISA o Western Blot test **2. HIV Antigen test:-** Substance that antagonizes or stimulates the immune system to produce antibodies (i.e Proteins that fight antigens) Antigens are often foreign substances such as bacteria or viruses. HIV antigen test are: o P24 antigen **INDICATIONS FOR VOLUNTEER HIV TESTING:-** ❖ Person who wants to be tested (voluntary) ❖ Those with high risk behaviors (multiple sexual partner, drug abuse)	Teaching / Learning	PPT

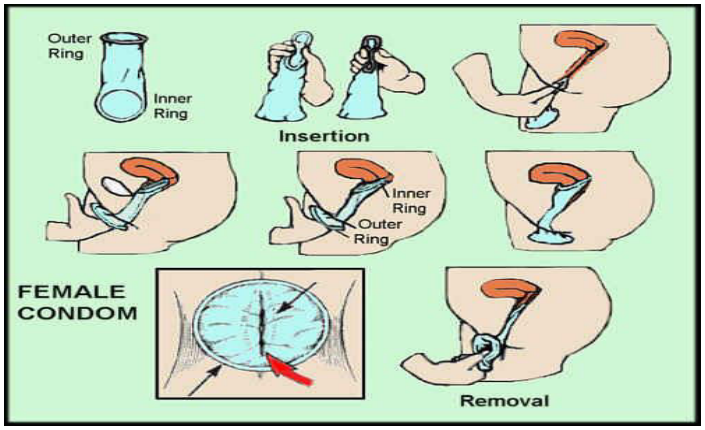
20 Min		❖ Men who have sex with men ❖ Person with multiple sexual partners or who trade sex for money, pleasure or drugs. ❖ Sexual partners of people who have high risk behaviors ❖ Injecting drug users ❖ Recipients and donors of blood, organ and semen ❖ Hepatitis B, Hepatitis C ❖ Tuberculosis infected person ❖ Persons with AIDS like illness or illness consistent with AIDS Infants born to HIV infected or High risk mothers **PREVENTION OF HIV** Prevention is the only way to stop HIV transmission According to NACP (2007- 2012) programmes overall objectives is to reduce the spread of HIV infection, and to strengthen the capacity of central and state government civil society and private sector to respond to AIDS on a long term basis The activities for prevention under NACP include ➢ Primary prevention: targets people at risk for HIV to prevent acquiring the infection 1. Integrated counselling and testing 2. Targeted intervention with transgender	Teaching / Learning	PPT / Pamphlet

		I. Safe sex (Condom promotion) II. Harm reduction III. Promoting access to safe blood ➢ Secondary prevention:Targets people known to be hiv infected, toprevent spread of the infection to others **Positive prevention** • Promotion of safe sexual practice • Infection control • Screening and treatment of HIV 1.INTEGRATED COUNCELLING AND TESTING CENTRE ▪ Early detection of HIV ▪ Provision of basic information on modes of transmission and prevention of HIV/AIDS for promoting behavioral changes ▪ Pretest counselling ▪ Posttest counselling ▪ HIV counselling & testing for TB patient 2. TARGETED INTERVENTION **I. Safer sex:** o Safer sex refers to the precaution to be taken so as not transit or acquire sexually transmitted infection include HIV o Safe sex practice prevent bodily fluids, which can carry viruses or bacteria from being transmitted between partners Safer sex and practices are **COUNSEL ON SAFER SEX AND REDUCING RISK OF TRANSMISSION**		

		1. Counsel on partner reduction while emphasizing consistent condom usage during all sexual encounter including anal intercourse 2. Counsel on less risky sex – choose sexual activities that do not allow semen, vaginal fluids, or blood to enter the mouth, anus, or vagina of the partner 3. Emphasize that even if a client is on ART, HIV transmission can still occur 4. Educate on symptoms of STI and counsel to receive prompt treatment if the client is suspected of having STI 5. Dispel any prevailing myths on cleansing of HIV infection through sexual intercourse with minors or others Discuss any other local myths that impact on positive prevention E.g. (condom transmit HIV) Normal sexual activity can continue, with above standard precaution ABC A -Abstinence B – Be faithful C – Condom use **What is condom?** ➢ A condom is sheath made of latex and available in a rolled form, packed in a sterile aluminum foil. ➢ Condom act as a wall that prevent the sperms and STI/HIV causing organisms from entering the vaginal cavity/penis. ➢ The closed lower end of the condom has teat which collects the seminal fluid.		

		Special varieties of condoms Plain, dotted, ribbed ultra-thin Many color with different flavors **When one should use condoms** ➢ When partners feels that one of them may have STD/HIV INFECTION ➢ One partner has more than one sexual partner ➢ When having casual intercourse ➢ When partner is commercial sex worker ➢ Partner could either male or female **Availability** Available at primary health centers and government hospital and NGOS as a free of cost.		

		Steps in male condom uses  ➢ check expiry date and open the packet carefully ➢ Roll the condom over the erect penis by pinching the of the condom to remove any air ➢ Note how the rim of the condom is turned out so that it could be rolled downwards ➢ Remove the penis from the vagina while still erect holding on to the condom at the base of the penis ➢ Remove the condom from the penis while it is still hard take measure to see that semen does not spill		

		➢ Tie a knot and discard the condom in the bin or wrap in paper and dispose **Steps in female condom uses**  ➢ It is used for vaginal sex ➢ It is advisable to decide on the beforehand as you may forget in the heat of the movement ➢ Always check expiry or manufacture date on the condom package, it should not be more than 4 years old		

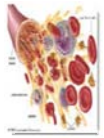
		➢ Using your fingers, carefully open the condom at the indicated place ➢ Make sure your fingernails do not damage the condom ➢ Do not use sharp objects ➢ Inspect the condom to make sure it is intact ➢ Rub the outside of the condom to evenly spread the lubricant inside the condom ➢ Find the comfortable position for inserting the condom ➢ Hold the condom at its closed end squeeze the inner ring ➢ Spread the vaginal lips with the other hand and insert the condom in the vagina ➢ Use your fore finger to push the inner ring all the way up in the vagina until you feel the pubic bone with your finger ➢ Make sure the outer ring ➢ Guide and insect the penis inside the condom, make sure the penis does not go underneath or bedside the condom ➢ If during intercourse the penis does not freely, there is a sound or the condom is moving in and out with the penis, add lubricant ➢ If the outer ring is pushed in the vagina or the penis goes beneath or to the penis goes beneath or to the side of the condom, stop and		

		put on a new condom ➢ Keep the condom on the during intercourse after ejaculation and after the penis is pulled out, squeeze and twist the outer ring to avoid spilling semen and pulling the condom out of the vagina ➢ Wrap the condom in toilet paper and as soon as possible, throw it away out of reach of others, do not flush the condom down the toilet ➢ Never reuse condoms **MYTHS** • Condoms fail to protect us from HIV • Condoms break during intercourse • Use condoms decrease pleasure • Condoms are reusable • Condoms irritating during sex • Condoms irritating during sex • Condom is sticky and oily • Women do not like it **II. Use sterilized needle and traditional practices**	Teaching / Learning	PPT

10 Min	enlist the ART therapy	❖ circumcision HIV transmission from penile anal intercourse is predominantly to the receptive partner risk unlikely to be directly modified by his circumcision status ❖ tattooing Ensure needles are disposable properly disinfection ❖ skin piercing practices (Ear, nose, cheek) Ensure needles are dispose properly dispose properly disinfected **III. Promoting access to safe blood** Blood units found to be HIV positive need to be destroyed. All blood banks follow national guidelines on screening donor blood for transmissible diseases. This includes HIV, syphilis, Hepatitis B & C, malarial parasite. If screening at a blood bank reveals HIV positive blood – the blood bank must refer the donor to an ICTC for counseling and testing. The blood banks are not allowed to reveal the status to the donor **TREATMENT**		

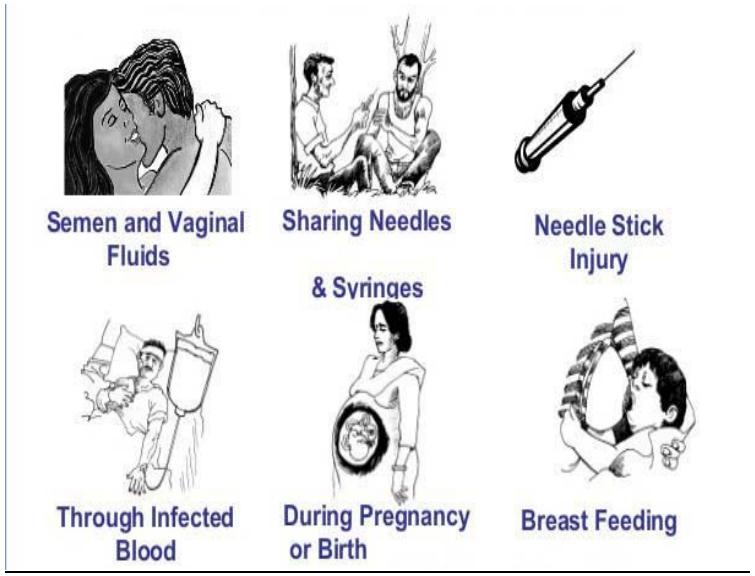
		ANTIRETROVIRAL THERAPY HIV anti-retroviral treatment is the main type of treatment for HIV or AIDS, it is not a cure, but it can stop people from becoming ill for many years. The treatment consist of drugs that have to be taken every day for the test of someone's life GOALS • Prolongation of life and improvement in quality of life • Greatest possible reduction in viral load for as long as possible • Immune reconstitution that is both quantitative and qualitative • Reduce of HIV transmission BENEFITS OF ART • Decrease hospitalization • Increase survival • Restore hope • Improve quality of life		

		• Benefits both adults LIMITATION OF ART • ART is not cure for aids • HIV is never entirely eliminated from the body • HIV can still be transmitted to other • ART is to be taken life long DRUG REGIMEN UNDER THE NATIONAL AIDS CONTROL PROGRAMME Regimen I - Zidovudine + Lamivudine +Nevirapine) Regimen I a - Stavudine + lamivudine+ Neveripine Regimen II - Zidovudine + Lamivudine (+Efavirenz Regimen II a - Stavudine + Lamivudine + Efavirenz Regimen III - Tenofovir + Lamivudine + Nevirapine Regimen III a - Tenofovir + Lamivudine + Efavirenz Regimen IV - Zidovudine + Lamivudine + Lopinavir/Ritonavir Regimen IV a - Stavudine + lamivudine +Stavudine + lamivudine		

நேரம்	பங்களிக்கும் நோக்கம்	பொருளடக்கம்	கற்பித்தல் .:.கற்றல் செயல்பாடு	ஒளி, ஒலி துணை கலங்கள்
½ நிமிடம்	**நோய் எதிர்ப்பு மண்டலம்:-**	**<u>வரையறை :-</u>** **<u>நோய் எதிர்ப்பு மண்டலம்:-</u>** ➢ நோய் எதிர்ப்பு மண்டலனமானது நோய் கிருமி தாக்கத்திலிருந்து தடுத்து நம் உடலை பாதுகாக்கின்றன. ➢ நோய் எதிர்ப்பு மண்டலத்தில் வெள்ளையணுக்கள் மிகவும் முக்கிய பங்கு வகிக்கினறன. ➢ உடலில் நுழையும் கிருமிகளான பாக்டரியா, பூஞ்சை, வைரஸ் ஆகியவைகளை வெள்ளையணுக்கள் தாக்கி அழிக்கினறன. ➢ CD4 செல் என்பது ஹெல்பர் செல்ஸ் எனப்படும். நோய் எதிர்பபு மண்டலத்தில் உள்ள பிற செல்களுக்கு CD4 செல் எச்சரிக்கை அளித்து நம் உடம்பை நோய் கிருமி தாக்கத்திலிருந்து பாதுகாக்கிறது. ➢ இரத்தத்தில் CD4 செல்களின் எண்ணிக்கையை வைத்து நோய் எதிர்ப்புச் சக்தியை கணக்கிடப்படும். ஏனென்றால் எச்.ஐ.வி CD4 செல்லை தாக்கி அழிப்பதனால், நோய் எதிர்ப்புச் சக்தி குறையும்.	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம் 

½ நிமிடம்	**எச்.ஐ. வி**	**எச்.ஐ. வி.** ➢ மனிதனின் நோய் எதிர்ப்பு சக்தியை குறைக்கும் கிருமி இது ஒரு ரெட்ரோ வைரஸ் இவை நோய் எதிர்ப்பு சக்தியில் உள்ள வு – செல்லை தாக்கி, அழித்து (அல்லது) செயலிழக்க செய்கின்றன. ➢ நோயின் தாக்கம் அதிகமாகும் போது நோய் எதிர்ப்பு மண்டலம் பலவீனமாகி அவை நோய் எதிர்ப்பு சக்தியை குறைக்கின்றன. இதனால் மனிதனின் உடலில் பல நோய்கள் ஏற்படுகின்றது. ➢ எச்.ஐ.வி தாக்கப்பட்ட மனிதன், தன் உடலில் வாழ்நாள் முழுவதும் இக்கிருமியை சுமப்பான்.	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம் 
½ நிமிடம்	**எய்ட்ஸ் (AIDS):-**	**எய்ட்ஸ் (AIDS):-** எய்ட்ஸ் என்பது பல தொற்று நோய்களின் கூட்டமைப்பு ஆகும். A– என்பது வெளியிலிருந்து பெறக்கூடியது என்றும் I– என்பது எதிர்ப்புச் சக்தி என்றும் D– என்பது குறைவு என்றும் S– என்பது பல நோய்களின் அறிகுறிகள் சேர்ந்து தோற்றமளிக்கும் நிலை என்றும் கொள்ளலாம்	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம்

3 நிமிடம்	**எவ்வாறு எச்.ஐ.வி உடலில் செயல்படுகின்றன**	**எவ்வாறு எச்.ஐ.வி உடலில் செயல்படுகின்றன ?** எச்.ஐ.வி ஆனது ஊனு4 செல்லை பயன்படுத்தி நான் இனத்தைபெருக்கி கொள்கின்றன. அதன் படிகளை கீழ் வரும் புள்ளிகளில் காணலாம் ♦ சிடி4 (CD4) செல்லில் இணைப்பு ♦ தலைகீழ் மரபணு வைரஸ், ஆர்.என்.ஏ (RNA) இருந்து டி.என்.ஏ வை (DNA) உருவாக்குகிறது. ♦ செல் உட்கருவில் ஒருங்கிணைந்து செயல்ப்படுகிறது ♦ ஒருங்கிணைந்து செல்கள் கரு நடத்த உதவுகிறது ♦ வைரஸ் கூறுகளின் இனப்பெருக்கம் ♦ புதிய எச்.ஐ.வி வைரஸ்கள் ஒருங்கிணைப்பு ♦ வெளியீடு **எச்.ஐ.வி யால் எய்ட்ஸ் வருவதற்கான காரணங்கள்:-** ♦ வைரஸ் பெருக்கத்தினால் CD4 செல்லின் எண்ணிக்கை குறைகிறது. ♦ தொடர்ந்து வைரஸ் பெருக்குவதனால், நோய் எதிர்ப்பு சக்தி குறைந்து, உடலில் நோயின் தாக்கம் அதிகமாகும். ♦ கிருமி தாக்கப்பட்ட மனிதன் பலதரப்பட்ட சந்தர்பவாத நோய் தாக்கத்திற்கு உள்ளாகின்றான்.	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம்

5 நிமிடம்	**எச்.ஐ.வி பரவும் வழிகள**	**எச்.ஐ.வி பரவும் வழிகள் :-**  **1. எச.ஐ.வி தொற்று உள்ளவருடன் கொள்ளும் பாதுகாப்பற்ற உடலுறவு:-** எச்.ஐ.வி தொற்று உள்ளவரின் விந்து (அல்லது) யோனியின் திரவம் ஆகியவை வாழ்வ்ழி செக்ஸ், யோனி அல்ல்து ஆசனவாய் வழியாக உடலுறவின் போது நுழையும். உடலுறவின் பொழுது யோனி (அ) ஆசனவாயில் ஏதேனும் சீறிய கிரள்கள், வாய்ப்புண்கள் இருக்குமாயின் எச்.ஐ.வி வைரஸ் பரவும். **2. தொற்றுள்ள தாயிடமிருந்து கருவில் உள்ள சேய்க்கு** தொற்றுள்ள தாயிடமிருந்து சேய்க்கு கருவிலேயோ, பேறுகாலதின் போதோ, தாய்ப்பால் மூலமோ எச்.ஐ.வி பரவுகிறது.	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம் 

		தொற்றுள்ள தாய் கர்பக்காலத்தில் சரியான சிகிச்சைப் பெற்றால் குழந்தைக்கு நோய் தொற்றுக்கான வாய்ப்பு குறையும். 3. **<u>தொற்றுள்ள இரத்தத்தைச் செலுத்துதல் :-</u>** தொற்றுள்ள இரத்தம் செலுத்துவதால் நேரடியாக எச்.ஐ.வி பரவ வாய்ப்புகள் அதிகம். 4. **<u>தொற்றுள்ள ஊசிகளும், குழல்களும் :-</u>** தொற்று நீக்கம் செய்யப்படாத ஊசிகள், ஊசிக்குழல்களைப் பயன்படுத்துவதன் மூலம் எச்.ஐ.வி பரவும். 5. **<u>தொழில் ரீதியாக :-</u>** மருத்துவ சார்ந்த தொழலாளர்களுக்கு கணிசமான எச்.ஐ.வி தொற்றுவதற்கான வாய்ப்பு உள்ளது (ஊசிமுனைகல், கூழ்மையான பொருள்களினால் ஏற்படும் காயம்) 6. **<u>தொற்றுள்ள உடல் திரவங்களால் :-</u>** ♦ தொற்றுள்ள இரத்தம் ♦ விந்து, தாய்ப்பால் ♦ யோனியின் திரவம் ♦ முதுகுதண்டியின் திரவம் ♦ செஞ்சுக் கூட்டுத் திரவம் ♦ பணிக்குடம் திரவம் ♦ இதய சுற்றில் உள்ள திரவம்		

3 நிமிடம்	**ஆபத்துக் காரணிகள்**	**ஆபத்துக் காரணிகள்** 1. **பாலியல் நடவடிக்கைகள் :-** ♦ குடி போதையில் (அல்லது) போதை மருந்து உட்கொண்டு உடலுறவில் ஈடுப்படும்போது ♦ பலரோடு உடடலுறவில் ஈடுபடும்போது ♦ வாயில் அல்லது பிறப்புறுப்பில் புண்கள் இருக்கும்போது. 2. **பாதுகாப்புயின்றி உடலுறவில் ஈடுபடுவது :-** ♦ எல்லா சமயத்திலும் ஆணுறை ∴ பெண்ணுறை அணியாமல் உடலுறவில் ஈடுபடுதல் ♦ யோனியின் புணர்ச்சியை விட ஆசனவாய் புணர்ச்சியில் எச்.ஐ.வி பரவ அதிக வாய்ப்புள்ளது. 3. **பால்வினை நோய்கள் :-** பால்வினை நோய்களால் பிறப்பு உறுப்புகளில் புண்கள் ஏற்படும். இப்புண்கள் எச்.ஐ.வி யை மிக சுலபமாக உடலில் புக வழிவகுக்கிறது. 4. **ஊசிகள் பயன்படுத்துவதன் மூலம்** தொற்று நீக்கம் செய்யப்படாத ஊசிகள், ஊசிக் குழல்களைப் பயன்படுத்துவதன் மூலம் எச்.ஐ.வி தொற்று பரவும். மிகச் சிறிய அளவு இரத்தம் பயன்படுத்திய ஊசிக் குழலில் தங்கிவிடுகிறது. இந்த ஊசிக் குழலை மறுபடியும் பயன்படுத்தும் போது தொற்றுக் கிருமிகள் நேரடியாக அடுத்தவரின் இரத்தத்தில் கலந்து விடுகிறது.	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம்

		5. "சுன்னத்" (ஆண்குறியின் நுனித்தோல் அகற்றல்) சுன்னத் செய்தவர்களுக்கு எச்.ஐ.வி பரவ அதிக வாய்ப்பு இருக்கும். எச்.ஐ.வி இவ்வகைகளில் பரவாது (புலப்படும் இரத்தத்தில் கிருமி தாக்கம் இருந்தால் மட்டுமே) ♦ கண்ணீர் ♦ வியர்வை ♦ சிறுநீர் ♦ மலம் ♦ எச்சில் ♦ முத்தமிடுதல், கட்டிப்பிடித்தல் ♦ இருமல், தும்மல் ♦ ஒரே நீச்சல் தொட்டியில் குளிப்பதின் மூலம் ♦ பாத்திரங்கள், ஒரே கழிவறை, போர்வைகள் பயன்படுத்துவதன் மூலம் ♦ பூச்சிகடிகள், கொசுக்கடிகள் ♦ தொற்று உள்ளவரிடம் தினமும் பழகுவதினால் **<u>நோய்நிலை படி வகைப்படுத்துதல் :-</u>** 1. நோய் நிலை படி – 1 எந்த அறிகுறியும் இல்லாமல் தொடர்ந்து பொதுமைப்படுத்தப்பட்ட நிணச்சுரப்பிப்புற்று.		
2 நிமிடம்	**<u>நோய்நிலை படி வகைப்படுத்துதல்</u>**		விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம்

		2. மருத்துவ நிலை – 2 ♦ விவரிக்க முடியாத மிதமான எடை இழப்பு ♦ மீண்டும் மீண்டும் சுவாசக்குழாயில் கிருமி தொற்று ♦ அக்கி (ர்நசிநள நுழளவநச) ♦ கோன உகட்டழற்சி ♦ மீண்டும் மீண்டும் வாய் புண் ♦ எண்ணெய்ச்சுரப்பு மிகைப்பு சருமவழல் ♦ பூஞ்சை ஆணி தொற்று 3. மருத்துவ நிலை - 3 ♦ விவரிக்க முடியாத கடுமையான எடை இழப்பு ♦ விவரிக்க முடியாத நீண்ட நாள் வயிற்றுப் போக்கு ஒரு மாதத்திற்கு மேல் ♦ விவரிக்க முடியாத தொடர் காய்ச்சல் ♦ வாய்வழி ஹேரிகேண்டியாசிஸ் ♦ நுரையீரல் காசநோய் 4. மருத்துவ நிலை - 4 ♦ நியுமோசிஸ்டிஸ் நிமோனியா ♦ மீண்டும் மீண்டும் கடுமையான பாக்டீரியால் நிமோனியா ♦ நாள்பட்ட ஹெர்பெஸ் சிமப்ளக்ஸ் தொற்று நோய் ♦ உணவுக்குழாய் கேண்டிய்ாசிஸ் ♦ கூடுதல் நுரையீரல் காசநோய் ♦ காபோசிஸ் தோல் புற்றுநோய் ♦ சைட்டோமிகாலோ தொற்று ♦ எச்.ஐ.வி மூளையழர்ச்சி ♦ மூளைக்காய்ச்சல்		

- நாள்பட்ட 1 ளழளிழசயைளளை
- பரவலாக்கப்படுகிறது மைக்கோசிஸ்
- லிம்போமா
- பரவும் கர்ப்பப்பை வாய்ப் புற்றுநோயின்
- நெப்ரோபதி
- இதயப்பிணி

<u>எச்.ஐ.வி நோய் தொற்றுக்கான நோய்நிலை படி வகைப்படுத்தல்</u>

i. **<u>எச்.ஐ.வி தொற்றுக்கான முதன்மை நிலை :-</u>**

எச்.ஐ.வி முதலில் உடலுக்குள் நுழையும் போது நோய் எதிர்ப்பு சக்தியான ஆட்டிஜென் எதிர்க்கொள்ளும் போது ப்ளு என்ற காய்ச்சல் உண்டாகும். இச்சமயத்தில் தொற்றுள்ள ஒருவருக்கு எச்.ஐ.வி யின் தாக்கம் உடலில் அதிகமாக இருப்பதால் இவை மிக சுலபமாக மற்றவருக்கு 2 – 4 வாரங்களில் பரவும்.

ii. <u>ஜன்னல் காலம் :-</u>

ஒருமுறை நோய் தொற்றுக்குள்ளாகி ஒருவரின் உடலில் 2 – 12 வாரங்களில் எச்.ஐ.வி ஆண்டிபாடி உற்பத்தி ஆகும், இவையே ஜன்னல் காலம், இச்சமையத்தில் தொற்றுக்குள்ளாகி இரத்தம், பரிசோதனையில் நெகடிவ் ஆக இருக்கும்.

iii. <u>அறிகுறியின்றி நீண்ட நாள் நோய் தொற்று :-</u>

விரைவில் நோய் எதிர்ப்பு சக்தியின் CD4 **500** க்கும் குறைந்து காணப்படும். எச்.ஐ.வியின் இனப்பெருக்கம் பெரும்பாலும் நிணநீர் கனுக்களில் நடைப்பெறும்.

2 நிமிடம்	**பரிசோதனைகள்**	**IV.** அறிகுறியுடன் எச்.ஐ.வி தொற்று நோய் எதிர்ப்பு மண்டலத்தில் உள்ள CD4 செல்களின் எண்ணிக்கை 200 – 500 க்கு என்று மிகவும் குறைந்து இருக்கும். **v** . எச்.ஐ.வி தொற்று முற்றிய நிலை எய்ட்ஸ் எச்.ஐ.வி தொற்று முற்றிய நிலையில் CD4 செல்களின் எண்ணிக்கை 200க்கும் மிக குறைந்து இருப்பதே எய்ட்சாகும். **பரிசோதனைகள் :-** இருவகை பரிசோதனைகள் உண்டு. 1. எச்.ஐ.வி ஆண்டிபாடி பரிசோதனை 2. எச.ஐ.வி ஆண்டிஜன் பரிசோதனை 1. **எச்.ஐ.வி ஆண்டிபாடி பரிசோதனை :-** நோய் எதிர்ப்பு சக்தியினால் உண்டாகும் நோய் எதிர்பொருள் (ஆண்டிபாடி) நாம் உடலில் உள்ள அன்னிய நோய் கிருமிகளை (ஆண்டிஜன்) கண்டறிந்து போரிட உதவி செய்கிறது. **இதன் பரிசோதனைகள் :-** 1. எச்.ஐ.வி ரேபிட் டெஸ்ட் 2. என்சைம்ஸ் விங்கட் இமினோ சார்பெண்ட் அஸே (எலிசா பரிசோதனை) 3. வெஸ்ட்ர்ன் பிளாட் டெஸ்ட்	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம்

		2. **<u>எச்.ஐ.வி ஆண்டிஜென் பரிசோதனை :-</u>** ♦ ஆண்டிஜென் என்பது அண்ணிய கிருமியான பாக்டீரியா (அல்லது) வைரஸ் ஆகும். ♦ ஆண்டிஜென் என்பது நோய் எதிர்ப்பு சக்தியை ஊக்குவித்து ஆண்டிபாடியை உருவாக்குகின்றன. ♦ ″24 என்பது எச்.ஐ.வி ஆண்ட்ஜென் பரிசோதனை ஆகும் **<u>தன்னார்வ எச்.ஐ.வி பரிசோதனையின் முக்கிய அறிகுறிகள் :-</u>** ♦ தன்னார்வத்தோடு சோதனைச் செய்ய விருப்பமுடையோர ♦ ஆபத்துள்ள நடத்தையில் இருப்பவர் (பலரோடு உடலுறவில் ஈடுபடுவர்) ♦ ஓரின பாலின சேர்க்கை ♦ பலருடன் உடலுறவில் ஈடுபடுவர் பணத்திற்காக மற்றும் சுகத்திற்காக பாலியல் தொழிலில் ஈடுபடுபவர். ♦ பாலியல் துணைவர் தொற்று ஆபத்தில் உள்ளவர் ♦ போதை ஊசிகளை பயன்படுத்துவோர் ♦ பரிசோதிக்கப்படாத இரத்தம், உடல் உறுப்பு, விந்து பெறுபவர் ♦ மஞ்சள்காமாலை டீ மற்றும் ஊ ♦ காசநோய் தொற்று உள்ளோர். ♦ எயிட்ஸ் நோயால் பாதிக்கபட்டோர் ♦ எச்.ஐ.வினால் பாதிக்கப்பட்ட அல்லது எச்.ஐ.வி ஆபத்துள்ள தாயிற்கு பிறந்த குழந்தைகள்.		

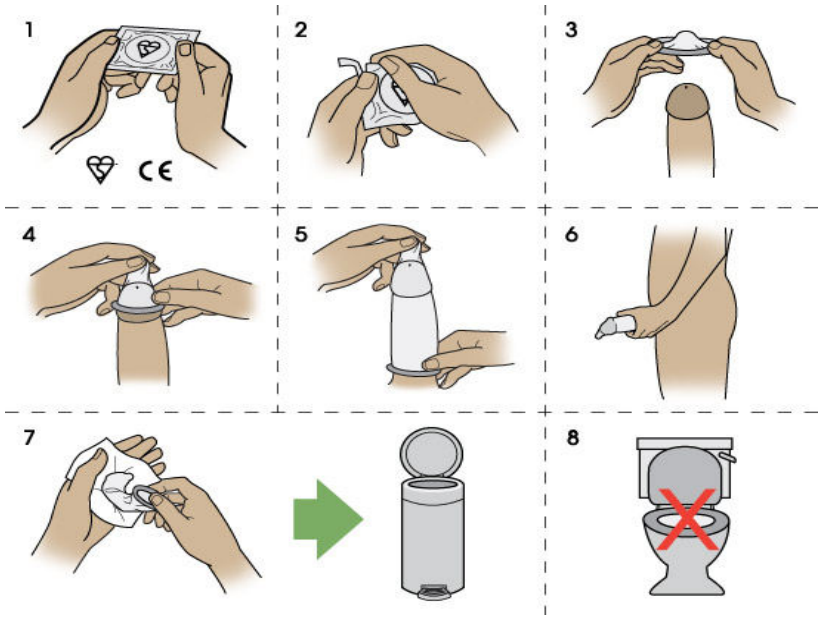
20 நிமிடம்	**எச்.ஐ.வி தடுப்பு முறைகள்**	**எச்.ஐ.வி தடுப்பு முறைகள் :-** தடுப்பு தடுப்பு முறைகள் பினபற்றுவதன் மூலமே எச்.ஐ.வி தொற்றை தடுக்க முடியும். தேசிய எய்ட்ஸ் கட்டுப்பாடு நிறுவனத்தின் (யுேஊழு) கீழ் நோய் தொற்று தடுப்பு முறைகள் 1. **முதல் நிலை தடுப்பு முறைகள் :-** எச்.ஐ.வி தொற்றுக்கு அதிக வாய்ப்பு உள்ளவர்களுக்கு தடுப்பு முறை a. ஒருங்கிணைந்த கலந்துரையாடல் மற்றும் பரிசோதனை b. மூன்றாம் இனத்த்வர்க்கு இலக்கு தலையீடுகள் ♦ பாதுகாப்பான உடலுறவு ♦ தீங்குக் குறைப்பு ♦ பாதுகாப்பான இரத்தத்தை ஊக்குவித்தல் 2. **இரண்டாம் நிலை தடுப்பு முறை :-** எச்.ஐ.வி பாதிக்கப்பட்டவரிம் இருந்து மற்றவருக்கு தாக்கும் ஆபாயத்தை தடுத்தல் ♦ பாதுகாப்பான உடலுறை கையாலுதல் ♦ பல கிருமி தாக்குதலை ♦ தடுத்தல்தொற்றை கண்டு அறிந்து சிகிச்சை பெறல்	விளக்குதல்/ கவணித்தல்	PPT/ துண்டு பிரசுரம்

		<u>முதல் நிலை தடுப்பு முறைகள் :-</u> **a. <u>ஒருங்கிணைந்த கலந்துரையாடல் மற்றும் பரிசோதனை</u>** ♦ எச்.ஐ.வி யை ஆரம்பத்தில் கண்டுயறிதல் ♦ எச்.ஐ.வி ∴ எய்ட்ஸ்யின் அடிப்படை தகவல்லான பரவம் முறை மற்றம் தடுக்கும் முறை கற்பித்து பழக்கத்தை மற்றவும் ♦ முன்சோதனை கலந்தாய்வு ♦ பின்சோதனை கலந்தாய்வு ♦ எச்.ஐ.வி கலந்தாய்வு மற்றும் காசநோய்கான பரிசோதனை **b. <u>மூன்றாம் இனத்தவருக்கு இலக்கு தலையீடுகள் :-</u>** **<u>பாதுகாப்பு உடலுறவு :-</u>** பாதுகாப்பான உடலுறவு என்பது முன்எச்சரிக்கையாக இருக்கும்பொழுது இருக்குபொழுது எச்.ஐ.வி ∴ பால்வினை தொற்று தடுக்கலாம். பாதுகாப்பான உடலுறவின் கையாலும் பொழுது உடலின் திரவத்தில் உள்ள வைரஸ் பாக்டீரியாவீன் தொற்றை இருதரப்பின் துணையிடமிருந்து தடுக்கும். **I. <u>இலக்குத் தலையீடு :-</u>** **a. <u>பாதுகாப்பான உடலுறவு :-</u>** பாதுகாப்பான உடலுறவு என்பது முன்னெச்சரிக்கையோடு பாதுகாப்பான உடலுறவு கையாளும் போது பாலிவனை நோய் மற்றும் எச்.ஐ.வி தாக்குதலில் இருந்து பாதுகாக்கப் படுகிறது.		

		பாதுகாப்பான உடலுறவு கையாளும் போது உடலில் உள்ள திரவத்தின் மூலம் வைரஸஸ், பாக்டீரியா என்னும் இருக்கிருமிகள் பரவுவதை தடுக்கமுடியும். **<u>பாதுகாப்பான உடலுறவின் ஆலோசனையும் நோய் தொற்றுக்கான வாய்ப்பும் :-</u>** பாலியல் துணையை எச்சமையத்திலும் காண்டம் பயன்படுத்துமாறு வலியுறுத்தவேண்டும். ஆபத்து குறைவான பாலியல் முறையை கையாள வேண்டும். அவை விந்து, யோனியின் திரவம், இரத்தம் திரவம் ஆகியவை உடலில் நுழையாதவாறு பார்த்துக்கொள்ள வேண்டும். எச்.ஐ.வி தொற்றுள்ள ஒருவர் ஏ.ஆ.டி. சிகிச்சையில் இருந்தாலும் மற்றவர்க்கு பரவ வாய்ப்புள்ளது. நோய் தொற்றின் அறிகுறி சீரான சிகிச்சை முறையை பாலியல் நோய் உள்ளவர்க்கு கற்பிக்க வேண்டும். நோய் தொற்றை தடுக்க சில மூட நம்பிக்கைகள் உண்டு. A. உடலுறவில் இருந்து விலகியிருத்தல் B. உண்மையாக C. காண்டம் பயன்படுத்துவதன் மூலம் **காண்டம் என்றால் என்ன ?** ♦ இவை**லேட்டக்ஸ்** இரப்பரால் ஆனவை. சுருண்ட வடிவம், சுத்தமாக அலுமினியம் உறையை கொண்டு தயாரித்து வெளிவருகிறது.		

		♦ காண்டம் எச்.ஐ.வி ∴ பால்வினை நோய் உள்ளவரிடம் இருந்து மற்றவருக்கு விந்து, திரவம் உடலில் புகாதவாறு தடுப்பு சுவராக பயன்படும். ♦ காண்டமின் கீழ் குவியில் பாலியல் திரவம் சேகரிக்கப்படும். **எப்பொழுது காண்டம் பயன்படுத்த வேண்டும் ?** ♦ பாலியல் துணை எப்பொழுதாவது பால்வினை நோய் ∴ எச்.ஐ.வி தொற்றுயிருக்கும் என உணரும்பொழுது ♦ ஒருவர் பலரோடு உடலுறவு கொள்ளுதல் ♦ பாதுகாப்பின்றி உடலுறவு ♦ தொழில் ரீதியான உடலுறவு கொள்பவர்கள் ♦ இரு துணையுமான பெண் அல்லது ஆண் **<u>காண்டம் கிடைக்குமிடங்கள் :-</u>** ♦ ஆரம்ப சுகாதார நிலையம் ♦ அரசு மருத்துவமனைகள் ♦ பேழுளு		

ஆணுறை உபயோகப்படுத்துவதற்கான முறைகள் :-



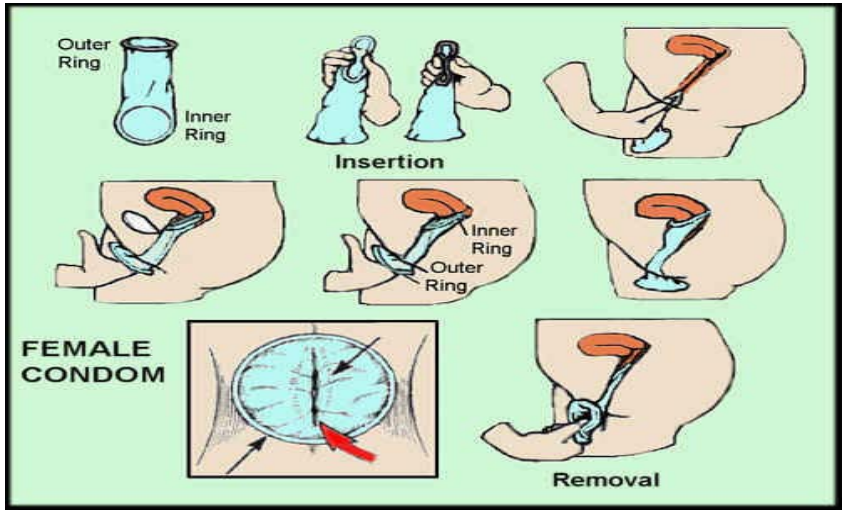
1. ஆணுறை அடங்கிய அட்டைப் பொட்டியின் மேல் குறிப்பிடபிபட்டுள்ள உபயோகிப்பதற்கான கடைசிகெடு நாள் முடிந்த ஆணுறைகளை உபயோகப்படுத்தக் கூடாது.
2. ஆணுறுப்பு விப்புத்தன்மை அடைந்தவுடன் ஆணுறையை அணிய வேண்டும்
3. ஆணுறை முனையில் காற்றுக் குமிழிகள் ஏறாமல் நீக்கிவிட்ட பின் ஆண்குறியின் முனையிலிருந்து ஆண்குறியின் அடிப்பகுதிவரை மெதுவாக உருட்டி அணிய வேண்டும்.
4. ஆணுறை அணிந்தபின் ஆணகுறியை உள்ளே செலுத்த வேண்டும்

முழுவதுமாக புணர்ச்சி முடியும்வரை ஆணுறை இருக்க வேண்டும். அது நழுவினாலோ அல்லது கிழிந்தாலோ வேறு ஒன்றை அணிய வேண்டும்.

5.புணர்சச்சி முடிந்து பின் ஆண்குறியின் அடிப்பாகத்தில் இருக்கும் ஆணுறையை பிடித்துக்கொண்டு ஆண்குறியை அது விரைப்புத் தன்மை முடியும் முன்னரே வெளியே எடுத்து விட வேண்டும். ஆணுறையை ஜாக்கிரதையாக உள்ளே இருக்கும் விந்து சிந்தாமல் எடுக்க வேண்டும்.

6.அதில் முடிச்சு போட்டு குப்பைத் தொட்டியில் எறிந்து விட வேண்டும்.

<u>பெண்ணுறை உபயோகப்படுத்துவதற்கான முறைகள் :-</u>



1. இவை யோனியில் புணர்ச்சிக்கு பயன்படுத்துபவை

		2. புணர்ச்சியில் இருப்பதற்கு முன்னே பெண்ணுறை அணிய வேண்டும். 3. பெண்ணுறை அடங்கிய அட்டைப் பெட்டியின் மேல் குறிப்பிடப்பட்டுள்ள உபயோகிப்பதற்கான கடைசிகெடு நான் முடிந்த பெண்ணுறைகளை உபபோகப்படுத்தக் கூடாது. 4. உங்களுடைய விரல்களை பயன்படுத்தி ஜாக்கிரதையாக வாய்பாகத்தை சரியான இடத்தில் வைக்கவும். 5. உங்கள் விரல் நகங்களினால் பெண்ணுறை கீழியாதவாறு பார்த்துக்கொள்ள வேண்டும். 6. கூர்மையாக பொருட்களை பயன்படுத்த வேண்டாம் 7. பெண்ணுறை சரியான நிலையில் உள்ளதா என சரிப்பார்த்துக்கொள்ள வேண்டும் 8. பெண்ணுறையின் வெளிபுரத்தில் சமமாக கசக்கி அதன உள்ளே இருக்கும், திரவம் சமமாக பரவ வழிவகுக்க வேண்டும். 9. பெண்ணுறை பயன்படுத்த சரியான உடற்அமைப்பை தேர்வு செய்ய வேண்டும். 10. பெண்ணுறையின் மூடிய பகுதியை இறுக்கி உள்வளையத்தை பிடிக்க வேண்டும். 11. மற்ற கையை கொண்டு, யோனியின் வாய் பகுதியை விரித்து, பெண்ணுறை உள்ளே பொறுத்த வேண்டும். 12. ஆள்காட்டி விரலை பயன்படுத்தி, உள்வளையத்தை உள்நுழைத்து, 13. பெண்ணுறையின் வெளிபாகத்தை சரிபார்த்துக் கொள்ள வேண்டும். 14. சரிபார்த்து, பெண்ணுறைக்குள் ஆண்குறியை உள்ளே செலுத்த		

		வேண்டும், ஆண்குறி சரியாக பெண்ணுறையில் வளையத்தில் உள்ளதா என சரிபார்க்க வேண்டும். 15. உடலுறவின் போது ஏதேனும் சத்தம், அல்லது உறை உள்ளே வெளியே நழுவுகிறதா என பார்க்கவும். 16. பெண்ணுறையின் வெளிபாகமானது, பெண்ணின் யோனியில் போய் விட்டால், அல்லது, பெண்ணுறையில் ஒரேபகுதியில் ஆண்குறி சென்றுவிட்டால், உடனே வேறு புதிய பெண்ணுறை பயன்படுத்த வேண்டும். 17. பெண்ணுறை உடல் உறவின பொழுதும், விந்து வெளியேற்றத்தின் போது, ஆண்குறி வெளியேற்றத்தின் போது, உறையை சுருக்கி, முறுக்கி, விந்து வெளியேரவாது பெண்ணுறை வெளியே எடுக்கவும். 18. பெண்ணுறை பேப்பரில் மூடி, அவை முடிச்சு போட்டு குப்பைத் தொட்டியில் எறிந்து விட வேண்டும். 19. பயன்படுத்திய பெண்ணுறை மறுபடியும் பயன்படுத்த கூடாது. **<u>மூட நம்பிக்கைகள் :-</u>** ♦ எச்.ஐ.வி. இருந்து காண்டம் பாதுகாப்பதில்லை ♦ உடலுறவின் போது காண்டம் கீழிய வாய்ப்புள்ளது ♦ காண்டம் மீண்டும் பயன்படுத்தலாம் ♦ உடலுறவின் போது காண்டம் எரிச்சலைத் தரும். ♦ காண்டம் பீசின் தன்மை கொண்டது. ♦ பெண்கள் ˙காண்டம் விரும்ப மாட்டார்கள்		

10 நிமிடம்	**சிகிச்சை முறைகள்**	**சுத்திகரிக்கப்பட்ட ஊசிகள் மற்றும் கலாச்சாரங்கள்** ♦ சுணணத் ♦ பச்சைகுத்தல் ♦ உடலின் உறுப்பில் துளையிடுதல் ♦ சீரண முறையில் கிருமி தொற்றுள்ள ஊசிகளை சுத்தம் செய்தல் **பரிசோதிக்கப்பட்ட இரத்தம் ஏற்றம்:-** இரத்தம் ஏற்றுக்கொள்வதற்கு முன் பரிசோதனை செய்த இரத்தத்தையே பயன்படுத்த வேண்டும். இரத்த தானம் 3 – 4 மாதத்திற்கொரு முறை கொடுக்கலாம். ஆனால் இரத்த தானம் செய்வதால் எச்.ஐ.வி நம்மை தாக்கும் என்ற கருத்து சரியன்று. தன்னுடைய இரத்தம் தொற்று இல்லாது இருக்கிறதா என்பதை உறுதி செய்த பிறகு கொடுக்க வேண்டும். **சிகிச்சை முறைகள் :-** **(ART – ANTIRETROVIRAL THERAPY)** ஆண்டி ரெட்ரிரோவிரல் தெரபி ஆனது எச்.ஐ.வி / எயிட்ஸ் - கான முக்கிய சிகிச்சை முறை ஆகும். இதனால் முற்றிலும் குணமாக்க முடியாது. ஆனால் நோய் தொற்றுகள் வராமல் பாதுகாக்கலாம். இம்மருந்தினை தினந்தோறும் எச்.ஐ.வி பாதிக்கப்பட்டோர். **குறிக்கோள் :-** ♦ வாழ்நாளை நீடித்து வாழ்க்கை தரத்தை உயர்த்தும் ♦ வைரஸ் பெருக்குவதை குறைக்கும் ♦ நோய் எதிர்ப்பு சக்தியை பலப்படுத்தும் ♦ நோய் தொற்றை குறைக்கும்.	விளக்குதல்/ கவணித்தல்	

		<u>ஏ.ஆர். டியின் நன்மைகள் :-</u> ♦ குறைந்த மருத்துவ தேவைகள் ♦ வாழ்நாளை நீடிக்கும் ♦ தன்னம்பிக்கை வளரும் ♦ வாழ்க்கை தரத்தை உயர்த்தும் ♦ இருவருக்கும் நன்மைகள் **வரையறை :-** ♦ ஏ.ஆர்.டி னால் எய்ட்ஸ் யை குணப்படுத்த முடியாது ♦ முற்றிலும் எச்.ஐ.வி யை முற்றிலும் உடலிருந்து வெளியேற்ற முடியாது ♦ எச்.ஐ.வி பிறருக்கு பரவ வாய்ப்புள்ளது. ♦ ஏ.ஆ.டி யை வாழ்நாள் முழுவதும் உட்கொள்ள வேண்டும்.		

எச்.ஐ.வி. & எய்ட்ஸ் பற்றிய உண்மைகள்

❖ வெளித்தோற்றத்தை வைத்து ஒருவருக்கு எச்.ஐ.வி. உள்ளதா? இல்லையா? என்பதை அறிந்து கொள்ள முடியாது.

❖ பால்வினை நோய் உள்ள ஒருவர் அந்நோயை முழுமையாக குணப்படுத்தாவிட்டால் எச்.ஐ.வி. வருவதற்கான வாய்ப்புகள் பலமடங்கு அதிகமாகும்.

❖ எச்.ஐ.வி-யை முழுமையாகக் குணப்படுத்த இதுவரை மருந்து எதுவும் கண்டுபிடிக்கப்பட வில்லை. ஆனால் எச்.ஐ.வி. உள்ளோரின் உடலில் உள்ள எச்.ஐ.வி. கிருமிகளின் பெருக்கத்தைக் கட்டுப்படுத்த தற்போது ஏ.ஆர்.டி. கூட்டுமருந்துகள் கட்டணமின்றி அரசு மருந்துவமனைகளில் தரப்படுகிறது.

சிகிச்சை முறைகள்

ஏ.ஆர்.டி. (ஆன்டிரெட்ரோவைரல் தெரபி)

❖ எச்.ஐ.வி. & எய்ட்ஸ் தொற்று உள்ளவர்களுக்கு உரிய மருத்துவம் ஏ.ஆர்.டி கூட்டு மருந்து சிகிச்சை ஆகும்.

❖ வாழ்நாளை நீடித்து, வாழ்கையின் தரத்தை உயர்த்தும்.

❖ வைரஸ் பெருக்கத்தை கட்டுப்படுத்தி நோய் எதிர்ப்பு சக்தியை அதிகரிக்கிறது.

❖ நோய் தொற்றை குறைக்கும்.

❖ ஏ.ஆர்.டி. மருந்தினால் எச்.ஐ.வி.யை குணப்படுத்த முடியாது.

எச்.ஐ.வி. & எய்ட்ஸ் பற்றிய தகவல்கள்

❖எச்.ஐ.வி.யை முழுமையாக குணப்படுத்த முடியாது.

❖ எச்.ஐ.வி. ஒரு சமூகப்பிரச்சனை

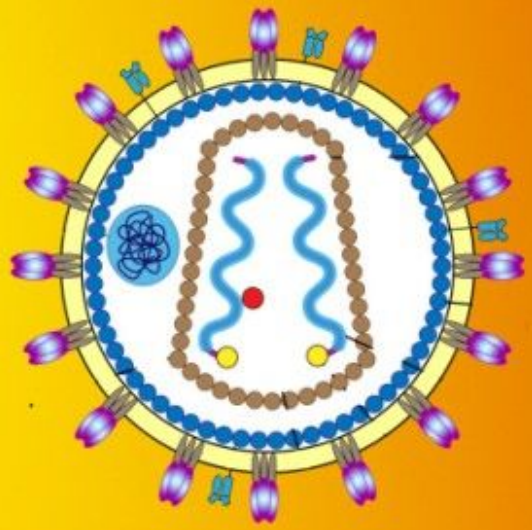
❖எச்.ஐ.வி யைப் பற்றி தெரிந்துக் கொள்ளுங்கள். தெரிந்ததை மற்றவர்களுக்கு உடனடியாக எடுத்துச் சொல்லுங்கள்.

எய்ட்ஸ்க்கு சிகிச்சை முறைகள் இல்லை என்பதால், எயிட்ஸை தடுப்பு முறைகள் மூலம் தான் தடுக்க முடியும். எய்ட்ஸை பற்றி தெரிந்திருந்தால் எய்ட்ஸை தடுக்கலாம்

சுதா பிரிண்டர்ஸ், வேலூர். செல் : 9345302532

எச்.ஐ.வி.யைப் பற்றி

எச்.ஐ.வி. ஒரு ரெட்ரோவைரஸ். எச்.ஐ.வி. கிருமி மனித உடலில் உள்ள வெள்ளை அணுக்களை நேரடியாகத் தாக்கி, நோய் எதிர்ப்பு சக்தியை குறைத்து, பல நோய்கள் தாக்க வழி வகுக்கிறது.



எய்ட்ஸ்

எச்.ஐ.வி. கிருமியால், உடலின் நோய் எதிர்ப்பு சக்தி குறையும் போது பல சந்தர்ப்பவாத நோய்கள் ஏற்படும் நிலையே எய்ட்ஸ்.

எச்.ஐ.வி. / எய்ட்ஸ்
எவ்வாறு பரவுகிறது

பாதுகாப்பற்ற முறையில் பலருடன் உடலுறவு கொண்டால் எச்.ஐ.வி. தொற்று ஒரு நபரிடமிருந்து மற்றவருக்கு பரவும்.

பரிசோதிக்கப்படாத எச்.ஐ.வி. கிருமி உள்ள இரத்தம் பெறுவதன் மூலம் ஒருவரிடமிருந்து மற்றவருக்குப் பரவும்

எச்.ஐ.வி. தொற்றுள்ள கர்ப்பிணிப் பெண்ணிடமிருந்து கருவில் இருக்கும் குழந்தைக்குப் பரவ வாய்ப்புகள் உள்ளது.

கிருமி தொற்றுள்ள சுத்தம் செய்யப்படாத ஊசிகளைப் பகிர்ந்து கொள்வதால் பரவும்.

சுத்தம் செய்யப்படாத ஊசிகளைக் கொண்டு பச்சை குத்தும் பொழுது பரவும்

எச்.ஐ.வி. / எய்ட்ஸ்
இவைகளின் மூலம் பரவாது

ஒன்று சேர்ந்து விளையாடுவது போன்ற சாதாரண பழக்க வழக்கத்தினால் பரவாது.

எச்.ஐ.வி. தொற்று உள்ள ஒரு நபரின் இருமலின் போதோ. தும்பலின் போதா மற்றவருக்குப் பரவாது.

எச்.ஐ.வி. தொற்று உள்ள ஒரு நபர் பயன்படுத்திய கழிவறையை மற்ற நபர் பயன்படுவதன் மூலம் பரவாது

எச்.ஐ.வி. உள்ள நபர் பயன்படுத்திய பாத்திரம் மாற்றி கொள்வதால் பரவாது.

கொசு கடி மூலம் பரவாது

எச்.ஐ.வி. / எய்ட்ஸ்
நோயின் அறிகுறிகள்

- தொடர்ந்து காய்ச்சல்
- எடை குறைவு
- வயிற்று போக்கு
- வாய்புண்
- நெறிகட்டுதல்
- காச நோய்
- புற்று நோய்

எச்.ஐ.வி-ன் பரிசோதனைகள்

- எலிசா பரிசோதனை
- வெஸ்டர்ன் பிளாட் டெஸ்ட்
- P24 ஆண்டிஜென் பரிசோதனை
- VCTC அனைத்து சுகாதார மையங்களில் உண்டு

எச்.ஐ.வி-ன் தடுப்பு முறைகள்

- உடலுறவின் போது சரியான முறையில் காண்டம் பயன்படுத்துதல்.
- ஒருவனுக்கு ஒருத்தி என்ற கொள்ளைகயில் வாழ்வது.
- சுத்திகரிக்கப்பட்ட ஊசிகளை பயன்படுத்துவதன் மூலம் எய்ட்சை தடுக்கலாம்
- பரிசோதிக்கப்பட்ட இரத்தம் ஏற்றத்தின் மூலம் எச்.ஐ.வி. தடுக்கலாம்